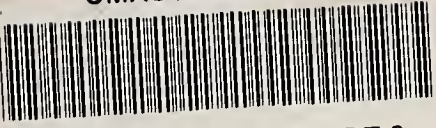



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GOVERNMENT DOCUMENTS
COLLECTION

ANNUAL REPORT

FISCAL YEAR 1989

DEC 07 1992

BUREAU OF RECREATION

CHARLES H. DANE, CHIEF

Introduction

In Fiscal Year 1989 residents of Massachusetts and Out of State visitors to the Commonwealths Recreation facilities totalled in excess of 12.5 million. The Division of Forests & Parks Bureau of Recreation accounted for 7,312,497 in revenue while providing these visitors with recreational opportunities on 265,000 acres. To attempt to list the achievements and events of a program of this magnitude would require much more space than is available in this report. The following are examples of some accomplishments of special people, programs and events.

Lyme Disease

Phase III of the Bureaus continuing program of risk assessment and control took place in F.Y.89. As concerns mounted the Bureau attempted to reduce anxiety in our users through a program of education. Signs to establish awareness were placed in areas of potential habitat, a slide presentation and script was developed for use by park interpreters.

Daminix treatment at certain areas continued for the third year-Assessment of risk took place at a number of parks new to the program.

On a volunteer basis, DEM-Personnel participated in a blood-testing study aimed at risk assessment for Lyme Disease among outdoor workers. This study was carried out by the Occupational and Environmental Health Center at Cambridge Hospital and the Department of Public Health.

Access for All

The Division of Forests and Parks continues to forge ahead with improvements for ensuring accessible recreation for all. To help publicize our efforts we printed a brochure titled, "Access to the Outdoors," which highlights the parks offering the very best accommodations for people of all abilities.

For visitors with hearing impairments we purchased 14 Telegraphic Devices for the Deaf (TDD) machines which were placed at the Boston and 5 Regional Administration offices, 7 Heritage State Parks and one at the Boston Harbor Islands State Park. The TDD/Voice symbol appears along side all 14 phone listing when ever in print such as brochure and press releases.

For visitors who use wheel chairs we have implemented a campsite reservation system in the nine camping areas which have improved toilet facilities. Campsites may be reserved up to six months in advance. Answering machines were also purchased for these areas in order for visitors to seek information when staff was not available to answer questions. In addition, car stops with the international access symbol were purchased for unpaved parking lots that are not able to be stenciled.

Public Information

Fiberglass signs exhibits featuring a map of the Commonwealth with all of the DEM outdoor recreation facilities have been installed in most recreation areas. The exhibits will indicate how expansive the state's park system is and will encourage visitors to visit new areas.

In addition we have printed 30 trail maps at various state forests and parks which give detailed information on available recreation trails; a Berkshire county brochure which lists most of the recreation facilities in the county; and a southeastern Massachusetts brochure printed in both the english and portuguese language which lists most of the facilities in the region with the exception of Cape Cod.

Public Information (cont'd)

Having experienced a major increase in fees we also took great care to publish a fee chart with updated information for the Camping and Access to the Outdoor brochures. Massachusetts Forests and Parks brochure were reproduced in a modified size to meet our fiscal challenges.

Promotion efforts this year focused on water and where title, "Water, Not Just a Drop in the Bucket." Our message focused on the protection of water quality and quantity. As an effort to promote our theme we printed posters and buttons. In addition the office of interpretive services developed a program curriculum for the interpretive staff which allowed them to conduct water related program throughout the summer. These events were listed in a calendar which was published bi-weekly and distributed at DEM facilities, to the news media and legislature.

Volunteer Program

Host Family Camping program was expanded to include 22 campgrounds this year. With a sharp increase in camping fees and a tenuous hiring schedule the program was a great success.

Trail maintenance was completed with the cooperation of many volunteers. Although the pace of the Adopt-A-Trail program has wound down the program continues to be successful in many areas where the facility supervisor has a personal interest.

Rinks

FY 89 saw the rink program reach it's lowest point in it's 21 year history. From February 6, 1989 through closing dates the rinks were closed from midnight until noon each day. In addition, each rink staff was augmented from personnel from all other division personnel.

In spite of the curtailment of hours and staffing problems the rinks accounted for approximately 2.8 million dollars worth of revenue. This represented about 40% of the division's income.

Rinks (cont'd)

The finals of the annual D.E.M. figure skating competitions were held at the Newburyport rink. Hundreds of children representing 18 D.E.M. rink compete. This is an outstanding program provided jointly by the figure skating pro's in our rinks and D.E.M. itself.

In summary, the D.E.M. rink program is a sound, integral part of the departments operation. Its success reaches hundreds of communities and millions of people across the commonwealth. With adequate funding and the pride and skill of its employees the rink program is prepared to continue its outstanding service for years to come.

Pools

In July of 1989 D.E.M. welcomed the New Storrow Park Pool as its 20th swimming pool in our pool program. The new pool is a model of beauty and function with its unique architectural design and three separate swimming tanks. It is a shining addition to a somewhat aging group of facilities.

Once again the learn to swim program was one of our most welcomed services. Whereas our pools are located in urban settings many of our students would not otherwise receive this lifesaving skill. It is important to the communities served by these pools that these programs continue in the future.

As always, D.E.M. pools provided much needed recreational swimming during the long hot summer months. From babies in our tots pools to the handicapped programs utilizing the pools everyone was provided an opportunity to swim in a quality facility.

BUREAU OF INTERPRETIVE SERVICES

ANNUAL REPORT FY 1989

ELLEN K. ROTHMAN, CHIEF

KARL HONKONEN, ASSISTANT CHIEF

Because most of the Bureau's FY 1989 initiatives were already underway when the crisis began to affect funding and staffing levels, Interpretive Services succeeded in bringing a number of projects to fruition during FY 1989.

Interpretive Programs

During the summer of 1988, 34 Park Interpreters were working in 26 of DEM's "traditional" parks; a staff of five covered Plymouth Rock and the newly refurbished Myles Standish Monument in Duxbury, and ten Island Managers provided interpretive programming on five DEM-managed islands in the Boston Harbor Islands State Park. Interpreters remained through the winter at Borderland, Holyoke Range, Nickerson, Maudslay, and Walden Pond State Reservation. Together with the Interpretation Coordinator for Region III, the Visitor Services Supervisor for the Harbor Islands, and the Assistant Chief of the Bureau, two of the year-round interpreters formed a curriculum development team that worked steadily throughout the year.

Their task was to assemble a kit of documents, objects, activities, and readings designed to help park interpreters emphasize the theme of water in their public programming. (The theme subsequently became the Department's theme for the summer and was used as a promotional as well as interpretive focus.) A prototype was developed and then replicated so that every park with an interpreter

(including the Heritage State Parks) received a complete kit. During the summer, each DEM interpreter used the kit to do weekly programs on the topic of water: pond studies, fishing clinics, water use surveys, coastal awareness, as well as games and stories related to water were on the schedule at parks throughout the state.

Training

Training designed to acquaint interpreters with the water kit, and the issues it was designed to interpret, took place at the 1989 Interpretive Training Institute held at Cape Cod Sea Camps in June of 1989. This year, for the first time, one entire day was devoted to one theme, and all DEM staff were required to attend workshops on water. In the morning, the emphasis was on the basic science of hydrology and on the current policy issues related to water resources in Massachusetts; in the afternoon, members of the curriculum development team ran hands-on workshops to introduce the variety of activities the kits made possible. Only first-time interpreters came to the first day and a half of the Institute, which was designed to teach the fundamentals of interpretation.

In January, all the year-round staff gathered in Lawrence Heritage State Park for a one-day training session in LIFE, Leisure is for Everyone, a program developed by the University of North Carolina to make recreational programming more accessible. In November,

another training day focused on improving the quality and effectiveness of press releases and calendar announcements. In March, the Bureau collaborated with Fisheries and Wildlife on a one-day interactive workshop designed to introduce all year-round interpreters to Project Wild/Aquatic Wild, an interdisciplinary wildlife curriculum.

Interpretive Materials

FY 1989 saw two successful collaborations between the Bureau of Interpretive Services and Friends groups. With a grant from the Dunham Institute for the Great Outdoors and help from DEM, the Friends of the Holyoke Range funded interpreter Bill Lafley to create a Literary Trail near the Notch Visitor Center. Each of the eight stops on the trail is marked by an embedded fiberglass sign with a handsomely illustrated quotation from one of several nature writers. At Borderland State Park, Bureau staff did the research, writing, editing, and graphic design for a new booklet on the park and the family whose estate it once was. With oversight from the Bureau's graphic artist, the Friends of Borderland had 2,500 copies printed. Proceeds from sale of the booklet will go to reimburse the Friends and support their other activities on behalf of the park.

In FY 1988, the Department produced a Spanish-language guide to state forests and parks in the Connecticut Valley. In FY 1989, a similar brochure was produced for the southeastern part of the state and printed in both English and Portuguese. No new park brochures were undertaken in FY 1989, although a self-guided trail leaflet was produced for Moore State Park as was another brochure for Great Brewster Island, bringing to completion a series of four for the Boston Harbor Islands State Park.

Arts-in-the-Parks

The summer of 1988 was the second season for the Childrens Theater in Residence at Maudslay State Park. The company produced two full-length plays, and drew ever larger audiences. At Halloween they offered "Maudslay is Haunted," as the final work in their outdoor season. During the summer of 1988, The Childrens Theater also toured several of the traditional parks with "Tellus," an original play about the environment.

In July of 1988, prize-winning sculptor Dennis Kowal became the visual artist in residence at Maudslay. In addition to opening his studio to the public on a regular basis, Kowal visits local schools to talk about the vital relationship between art and nature and arranges for small groups of students to visit his studio.

June of 1989 marked the second year that DEM expanded its summer concerts beyond Maudslay (where the Merrimack Valley Philharmonic played in July, and the Heritage State Parks (each of which offers a weekly concert series in the summer)). The Department sponsored free concerts at Scusset, Harold Parker, Purgatory Chasm, and D.A.R. State Forest. In addition, the Friends of the Holyoke Range and DEM began a new collaboration: a Sunset Concert Series at the newly restored Summit House atop Mt. Holyoke. Conceived and organized by a Holyoke Range interpreter, the concerts were an immediate success. With help from DEM and proceeds from the concerts, the Friends were able to restore the piano which was left behind when the hotel was abandoned in 1938. Next summer, a rented piano will not be needed; performers will be able to use the Summit House's own restored piano.

In September and October of 1988, 12 artists participated in DEM's third annual outdoor sculpture exhibition. The show at Bradley Palmer State Park received excellent press coverage, including an admiring review in the Boston Globe, and was well received by the public.

Conferences

In October 1988, the Chief of the Bureau was the first American participant in a conference for European interpreters, held at the Peak Hill National Park in England. In the spring, she served on an interagency planning team for a national conference on urban interpretation, sponsored by the National Park Service. Visitor Services staff from all of the Heritage State Parks attended some or all of this three-day conference, which was held in Lowell April 4-6.

Special Projects

Through FY 1988, there were humanists in residence at five of the Heritage State Parks as part of the "Shifting Gears Project," a collaboration between DEM and the Massachusetts Foundation for Humanties and Public Policy, with funding from the National Endowment for the Humanities and the Massachusetts Council on the Arts and Humanities. Each of the scholars worked with park staff and the local community to document and communicate the changing meaning of work over the last eighty years. Each scholar came up with a different final product: an exhibit on the Heywood Wakefield company in Gardner, for example, or, in Holyoke, a theatrical presentation based on the oral history of one particular neighborhood.

The Chief of the Bureau is on the Steering Committee of the Secretary's Advisory Group on Environmental Education (SAGEE), a group called together in the winter of 1989, while the Assistant Chief serves on a planning team to expose classroom teachers in the Pioneer Valley to environmental issues. Workshops will be offered in the fall of 1989. The Chief was also named the Director of Forests and Parks' designee on the three-person Administration Committee for the Waquoit Bay National Estuarine Research Reserve. In that capacity, she was actively involved in recruiting and hiring a new Program Director for the Reserve and in facilitating its development as a center for estuarine research and public education.

The Chief of the Bureau is also co-chair of the Working Group on Historic Sites (WGHS), formed in the spring of 1989. Representatives from Planning and Development and the Division of Forests and Parks are working together to assess the strengths and weaknesses in the way DEM manages its historically significant resources and to recommend new policies to the Commissioner.

Bureau staff have continued to be actively involved in several other planning projects. The Master Plan for Maudslay was finished in FY 1989 and the Concept Plan for Moore State Park and GOALS plans for Robinson and Salisbury Beach neared completion. All of these plans demanded considerable time from Bureau staff. The Chief of the Bureau of Interpretive Services also served on the review team for the Lynn Heritage State Park exhibit, which will be completed and installed in FY 1990.

ANNUAL REPORT

FISCAL YEAR 1989

Bureau of Urban Services

Robert E. Freedman, Chief

Brian Shanahan, Assistant Chief

Introduction

Attendance at the Heritage State Parks in Fiscal Year 1989 was significantly high (935,394), but somewhat less than the previous year (1,007,480). The decrease in attendance was partly due to fewer programs being offered - the consequence of vacant positions in our Visitor Services staff and an extremely hot, dry summer in 1988, making a day at the beach more appealing than a visit to an urban park.

Awards

Several of the parks received awards from the Massachusetts Recreation and Park Association for various programs they conducted. The most significant program award was received by Holyoke Heritage State Park for hosting the American Folklife Festival, an annual event organized and sponsored by the Smithsonian Museum. Holyoke not only received the Massachusetts award for this program, but the New Regional Council award and the Arts and Humanities Award from the National Recreation and Park Association. Marlene O'Donnell, Holyoke Heritage State Park Supervisor, received the Arts and Humanities award at the Annual Congress of the National Recreation and Park Association held in September 1988, in New Orleans.

Other parks receiving awards from the state association were:

- o Fall River Heritage State Park - "Wind Circus" (an outdoor wind sculpture exhibit).
- o Boston Harbor Islands State Park - "Kidleidiscopes" (an environmental education program on Grape Island).

The Heritage State Park system was awarded a "Gold Medal" by the Massachusetts Horticultural Society. The award was for both the exceptional quality of the design of the parks, and, for the quality of their maintenance and programs. The latter is significant in that it's unusual for a horticultural society to cite programs.

Programming and Services

The Heritage State Park continue to offer a variety of recreation and interpretive programs. During Fiscal Year 1989, 922 programs were planned, organized, and conducted by Visitor Services staff.

Some of the program highlights this year were:

- o The American Folklife Festival which was restaged for 3 days at Holyoke Heritage State Park. It attracted over 30,000 visitors.
- o The "Bread and Roses" festival in Lawrence brought in over 20,000 visitors to that City. The Heritage State Park plays a key role in the planning, organizing, and conducting of this annual special event.

- o "Fall River Celebrates America" - hosted at the park but organized by a city-wide committee, this 3 day celebration attracted over 90,000 people.
- o "Wind Circus" - an outdoor exhibit of several wind sculptures created by the internationally known Japanese artist, Shingu. It was exhibited for several weeks in the "meadow" at Fall River Heritage State Park.

Two mobile stages were purchased this year to provide better facilities for park programs that require staging, sound systems, lighting, etc. The mobile stages preclude the need for more expensive permanent facilities, which when not in use can be eyesores in these beautiful parks.

The excursion boat service at Gardner Heritage State Park, introduced last year, is now operated as a concession, saving state labor costs. The concessioner introduced paddleboats this year which have been extremely popular.

Water taxi service from Lynn Heritage State Park to the Boston Harbor Islands State Park ran at over 50% capacity. Costs are absorbed by the contract operator who charges a fee for the roundtrip.

Several Heritage State Parks and the Boston Harbor Islands State Park participated in the Department's "Water: not just a drop in the bucket program" during the year.

Planning and Development of New Heritage State Parks

Bureau staff review and comment on the planning and design of the

5 Heritage State Parks that, at this time, are under the jurisdiction of the Division of Planning and Development:

- o Final design: Lynn Visitors' Center (sitework)
- o Final design: Dillaway-Thomas House (sitework)
- o Preliminary design: Roxbury Visitors's Center
- o Final design: Turners Falls (Visitors' Center, site, boat house)
- o Master Plan: New Bedford Heritage State Park
- o Conceptual design: Blackstone Heritage State Park Visitors' Center

Boston Harbor Islands State Park and Pilgrim Memorial State Park

The Boston Harbor Islands State Park now has a self-guided interpretive trail on each island staffed by an Island Manager. A larger water taxi boat was introduced this year which significantly reduced passenger waiting time on Georges and the other islands, while increasing passenger comfort because of the larger, faster, and more modern boat. New outhouses replaced the older ones on the islands. They were designed for easier access by people with disabilities.

The visual quality of Pilgrim Memorial State Park was greatly improved by the removal of an unsightly fishing boat used for several years by a tenant as a "museum" and souvenir shop.

Miscellaneous Items

- o The responsibility for management of Dighton Rock State Park was transferred from the Bureau of Recreation to the Bureau of Urban Services.

- o Several Bureau and park staff attended and participated in the first "New England Urban Forum" on park issues. It was held on September 7, 1988, at the Sturbridge Sheraton. Issues discussed in a "roundtable format were:
 - Contract services
 - Public image
 - Staff morale, labor issues
 - Impact of societal trends
- o The Bureau hosted a group of planners and park administrators from Norway interested in using the Massachusetts Heritage State Parks as a model for revitalizing an industrial area along the Aker River in Oslo.
- o A group of urban planners from England met with the Chief of Urban Services asking questions about the Massachusetts Heritage State Parks because of interest in that country in establishing a similar system.



BUREAU OF FOREST DEVELOPMENT

ANNUAL REPORT FY 1989

THOMAS F. QUINK, CHIEF FORESTER



INTRODUCTION

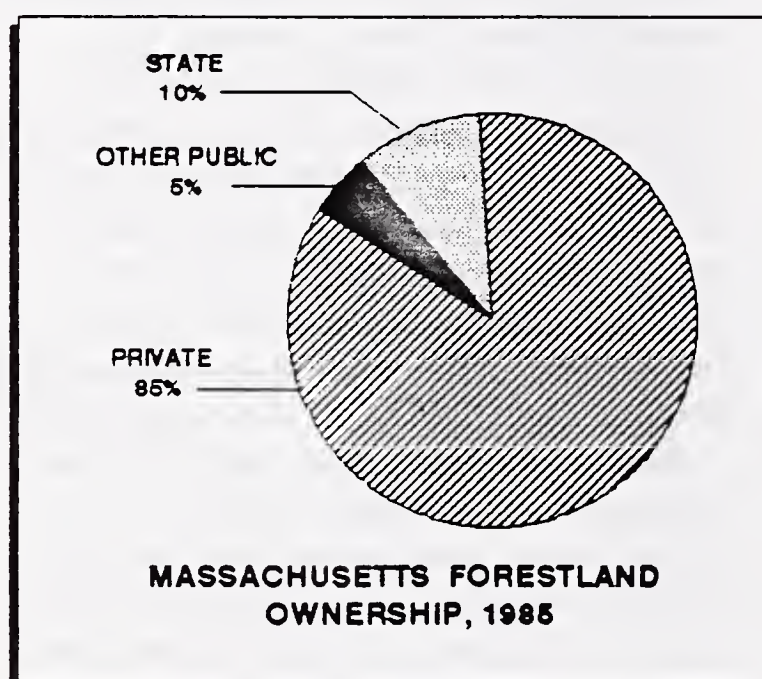
Conversion of forests in tropical regions of the world has resulted in concern over "global warming". Most professional foresters share this concern. However, the general public and some environmental groups are pointing fingers at all who would harvest trees or promote such harvests as being contributors to this "greenhouse effect". An opportunity exists, with those of us wishing to have healthy managed forests, to educate, in a positive way, about forestry. Studies conducted as far back as 1970 show healthy managed forests producing about four tons of oxygen per acre per year and consuming an equal amount of CO_2 in the process. These studies further show "... an old growth forest consumes as much oxygen as it can generate. This is because growth slows down and decay sets in. In this kind of stabilized forest community, there is no net production of new organic material - respiration of new oxygen is balanced off by consumption". This is also true of younger, overgrown, stagnated (stabilized) forests. It is more important today (1989) to manage the forest of Massachusetts than ever before, and yet less is being done amid increasing opposition to human "intervention in nature". This truly is a challenge to DEM foresters as we enter the last decade of this century.

Michael Parker
Service Forester

PRIVATE LAND MANAGEMENT

Service Forestry Overview

Fourteen Service Foresters are distributed throughout the Commonwealth with the responsibility of assisting private forest landowners in managing their forests. Privately-held forests are the predominant ownership throughout the United States and in Massachusetts 85% of the timberland is held by the private sector. Because of this high proportion of forests in relatively small acreages, primarily non-industrial, owned by people with limited knowledge of stewardship of this resource, the Service Forester program is extremely important.



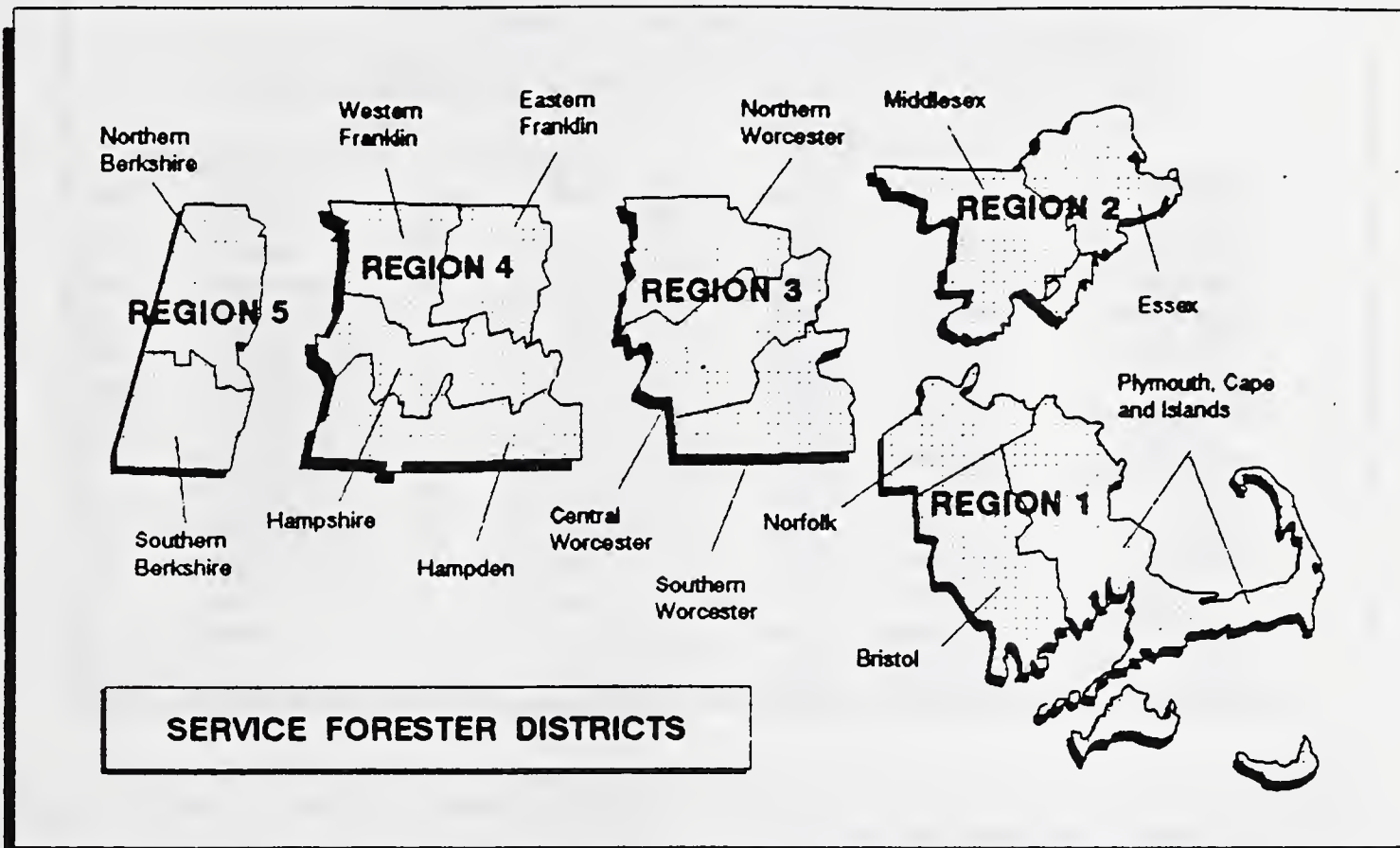
A number of laws and programs, both federal and state, have been implemented dealing with private forests. The Service Forester's program is legislated through the Cooperative Forestry Assistance Act, 1978 (PL95-313). This law is designed to assist state forestry programs in providing technical assistance to non-industrial private forest landowners. Federal programs under the Agricultural Conservation and Stabilization Service (ASCS) provide funds to assist owners in carrying out certain practices to manage their forests. The Massachusetts Forest Tax Law (Ch. 61) is a means by which forest owners can reduce the annual property tax on forest lands, by having the tax deferred until a harvest is conducted and income gained. Forest landowners are governed in the cutting

of forests by the Massachusetts Forest Cutting Practice Act (Ch. 132) which requires a permit to cut and places certain restrictions on operations particularly with regards to slope and wetlands. These activities, as well as many others of an educational nature, require the services provided by these foresters.

The privately sponsored Tree Farm Program, which recognizes and promotes forest management, is supported by the Service Foresters. Harold Jackson, Middlesex County Service Forester, is the statewide program chairman. One hundred eleven inspections were made during FY89 for recertification or new Tree Farm designation. Carmine Angeloni, Service Forester, Hampshire County, nominated this year's MA Tree Farmer of the Year, Alan and Joanna Page of Belchertown. This year an Outstanding Municipal Tree Farm Award was presented to the Town of Falmouth for their stewardship of the town forest. The nomination was made by John Clement, Service Forester. The Falmouth Town Forester is Brian Dale, a member of the State Forestry Committee. In addition to the state's forester's participation, consulting and industrial foresters contribute to the success of this program.

In the more urban sections of the state, Service Foresters assist in urban forestry matters. The number of forest landowners in the state has increased appreciably since 1972. This change has largely occurred in acreages in the one to nine acre size class estimated to be 190,700 owners. These owners are less knowledgeable about forest resources than those holding larger tracts and have different objectives in owning their forest. Educating and assisting these owners creates a new challenge for the Service Forester's program.

The various programs with which the Service Foresters are involved are extremely important in retaining "Green Space" in the Commonwealth. Chapters 61 and 61A, in particular, contribute to forest and farm land retention. Stewardship of forests maintains their vigor, thus contributing to the exchange of CO₂ for O₂. Service Foresters are the key personnel involved in encouraging and assisting forest landowners in forest land stewardship.



Forest Tax Law / Farmland Assessment (Chapters 61 and 61A)

FY89 showed an increase in the number of new applications for both Chapter 61 and 61A after four years during which applications were fewer than in the previous year.

During FY89, 149 new applications/management plans containing a total of 8,510 acres were processed into the Ch. 61 program. This represents a 15% increase in the number of plans submitted from FY88. A total of 39 new application/management plans covering 5,616 forested acres were processed in the Ch. 61A program.

There was also an increase in the total number of Ch. 61 and 61A management plans and acres under management in the state. Ch. 61 increased 3.6% in the number of acres and 4.7% in the number of plans over the FY88 figures. Ch. 61A increased 28% in acres and 16.7% in plans.

An amendment was added to Ch. 61, Sec. 8, which increased the time period in which the towns must exercise their first refusal option from 60 to 120 days.

This allows towns more time to arrange financing for the purchase of classified forest land if they desire to acquire it.

The Senate Taxation Committee drafted proposed amendments to Ch. 61 and submitted them to the legislature during FY89. They concerned the rights of cities and towns to purchase land which is to be removed from Ch. 61 classification. The proposed changes are still pending.

A number of meetings and workshops were held across the state to inform both landowners and government officials about Ch. 61 and 61A. The continued pressure to develop forest land for housing and industrial use makes the use of Ch. 61 and 61A to preserve open space very important.

Analysis of the 1985 Forest Service forest inventory and forest landowner survey statistics for Massachusetts indicate a very large group of forest owners with less than ten acres (190,700). Using as a basis all owners of private forests regardless of size, gives an average ownership of 11 acres. Considering only those with ten acres and larger, the average size of holding increases to 48 acres. However, including only owners holding 20 acres or more provides an average of 75 acres.

**ACREAGE AND NUMBER OF PLANS FOR FORESTED LAND BY COUNTY,
CHAPTER 61 AND CHAPTER 61A, AS OF DECEMBER 31, 1988.**

County	Chapter 61		Chapter 61A		Total	
	Acres	Plans	Acres	Plans	Acres	Plans
Franklin	43,111.4	507	5,081.8	38	48,193.2	545
Worcester	45,391.8	627	1,087.1	33	46,478.9	660
Berkshire	32,213.5	299	729.5	7	32,943.0	306
Hampshire	28,619.7	375	1,360.4	13	29,980.1	388
Plymouth	22,609.1	235	1,301.8	32	23,910.9	267
Hampden	18,343.3	234	1,317.8	13	19,661.1	247
Middlesex	12,942.7	286	1,250.7	29	14,193.4	315
Essex	6,824.9	153	1,033.2	22	7,858.1	175
Bristol	7,087.7	103	241.7	6	7,329.4	267
Norfolk	3,166.9	90	376.8	9	3,543.7	99
Barnstable	119.8	7	44.4	1	164.2	8
Dukes	144.6	4	0	0	144.6	4
Total	220,575.4	2,920	13,825.2	203	234,400.6	3,123

Table 1

Statistics for forest lands under Ch. 61 indicate the average holding is 75 acres and for forest land under Ch. 61A, 68 acres. The average size of holding under Ch. 61 is lower than the average from Worcester County east, with the exception of Plymouth County, for which the average Ch. 61 holding is 96 acres. A similar pattern is formed for forest land under Ch. 61A in which case the average size of area is 40 acres for Worcester County and those to the east, whereas it is 119 acres for the four western counties, with Franklin having the largest average under Ch. 61A of 154 acres.

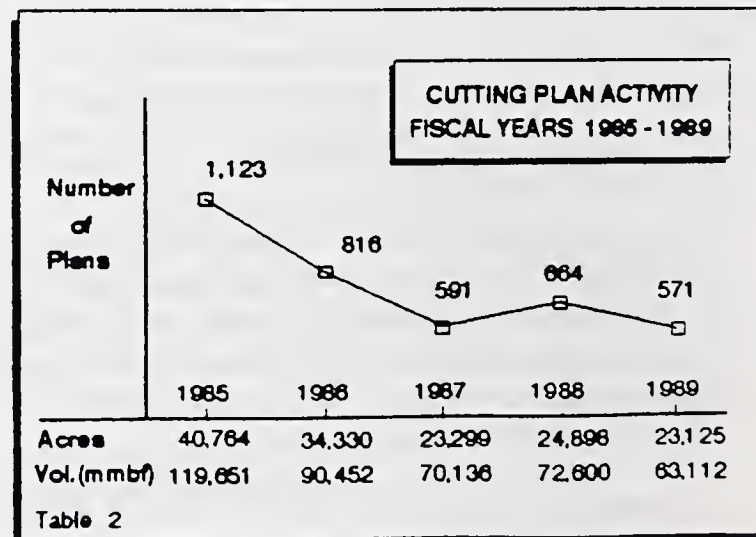
John Clement
Service Forester

on private forests over a five-year period was 2,845 bd. ft. with little variability from the yearly means (2,635 to 3,010). Over the past three years the private acreage cut has been relatively constant; although lowest in FY89 and, also, with the lowest average removed during that three-year period. State forest timber sales, which are not included in the Ch. 132 data, stayed relatively constant in FY89.

There was an open winter which created ideal logging conditions. This helped create a glut in pine invento-

Forest Cutting Practices Act (Chapter 132)

Cutting activity fell off in FY89 as reflected in the number of cutting plans received and volume harvested. It was the lowest level since the law was amended (Table 2). The major reason was poor market conditions as demand for white pine and red oak fell off. The average volume cut per acre harvested



FY 1989 CUTTING PLANS BY DISTRICT

District	Approved	Acres	M.B.F.	Cords	Tons
Plymouth, etc.	9	205	355	1,050	-
Bristol	8	216	186	560	-
Norfolk	4	132	38	285	-
Essex	14	333	419	1,139	30
Middlesex	38	1,225	2,962	1,907	7,409
N. Worcester	82	2,696	5,257	4,432	7,320
C. Worcester	61	2,318	4,131	6,647	-
S. Worcester	45	2,321	2,483	6,301	-
E. Franklin	55	2,331	5,162	4,127	22,013
W. Franklin	78	3,012	5,460	5,117	-
Hampshire	46	1,556	3,032	1,815	17,039
Hampden	64	2,560	5,328	3,754	-
N. Berkshire	34	2,441	3,617	1,496	-
S. Berkshire	33	1,779	4,766	1,209	-
Totals	571	23,125	43,194	39,839	53,811

Table 3

ries which, along with a long spring mud season, led to reduced cutting during the second half of the fiscal year. Table 3 summarizes Ch. 132 plans by district.

A policy for administration of Ch. 132 was drafted by Carmine Angeloni and reviewed by the forestry and fire Ch. 132 coordinators. The final draft was presented to the Chief Forester in June and is awaiting action by the new Director in order to incorporate it into the Division of Forest's and Park's policy handbook.

A harvester's license database was developed by Anne-Marie Loud from which she printed up-to-date lists which were distributed to each Service Forester and Fire Warden.

Mike Fleming prepared a draft Ch. 132 database which will be perfected and distributed in FY90.

In order to keep pace with amendments to the Wetlands Act, we initiated a new policy this year whereby each cutting plan is checked against the "Atlas of Estimated Habitats of State-Listed Rare Wetlands Wildlife." Those plans impacting possible habitat areas are forwarded to the Natural Heritage program for comment.

Dick Kulis is drafting changes to the Ch. 132 regulations regarding wildlife to further bring Ch. 132 in

line with Ch. 131, S 40.

A legislative package was submitted this year to make some changes in Ch. 132. These changes would further define the responsibilities of landowner's agents and licensed harvesters. At this date, they have not been acted upon by the legislature.

The DEM GEIR preparation continues. As a part of the background studies for this report, Jim Patric retired Forest Service, USDA, watershed researcher conducted an on-the-ground study of sample of Ch. 132 logging operations done in 1986. This report basically gave high marks to DEM and Ch. 132 for controlling erosion and damage to water supplies. Mr. Patric also made several suggestions for improvement of the program. The Ch. 132 subcommittee report for the GEIR was submitted in November. Their report suggested a number of changes in the Ch. 132 program. Hopefully, with the release of the GEIR in FY90 consideration of these proposals will be implemented.

There were four Ch. 132 coordinators' meetings in FY89, two of these were joint Forestry/Fire Bureau meetings.

Joseph Smith
Coordinator, Chapter 132

Timber Harvester Licenses

Chapter 132, Sec. 46 requires individuals, firms, or corporations in the business of timber harvesting for profit to be licensed. In FY89 there were 568 licenses issued, an increase of 4.2% over the previous year. Of the total, 487 were in-state businesses and 81 out-of-state. There was a much larger proportional increase in the out-of-state firms during FY89 than those in-state. License fees totalled \$6,490 which was income to the General Fund.

Agricultural Stabilization and Conservation Service (ASCS) Forestry Programs

Forestry Incentives Program (FIP)

The Massachusetts FIP allocation for Federal Fiscal 1988 was \$120,022, a very slight decrease from \$121,020 for 1987. County allocations tended to become spread more evenly across the state as three of last year's top four counties decreased (Berkshire - 45%, Hampden - 36%, Plymouth - 15%), while all others increased, led by Middlesex (206%), Hampshire (97%), and Worcester (35%).

Although county allocations evened out somewhat,

acres treated continue to be heavily concentrated in a few areas. Of the 938 acres treated in 1988 (up 16% over 1987), 78% was in four counties: Berkshire - 373 acres (40%); Franklin - 139 acres (15%); Plymouth - 112 acres (12%); Hampden - 105 acres (11%). As in previous years, 903 acres (96%) were for timber stand improvement, while tree planting accounted for the remaining 35 acres (4%).

Agricultural Conservation Program (ACP)

The forestry portion of Massachusetts ACP consists of tree planting (FR-1) and timber stand improvement (FR-2) on lands ineligible for FIP, and of special practices not available under FIP, fuelwood access roads (SP-37), fuelwood thinning (SP-38), and forest management planning (SP-44). Total 1988 cost-shares for these practices were \$36,045, a 76.2% increase over 1987. This increase is due, in part, to a 26% increase in overall ACP distributions, and to the active interest shown in SP-44, forest management planning. During 1988, this practice was utilized by 64 participants (75% of total forestry applications), with cost-shares of \$24,573 (67%) on 8,399 acres (96%).

Similar to FIP, acres treated under ACP practices tend to be concentrated in a few districts: Berkshire

FY 1989 A.S.C.S. FORESTRY PROGRAMS BY COUNTY

County	Planting (acres)	T.S.I. (acres)	Fuelwood (acres)	Planning (acres)	Roads (miles)	Practices (number)
Barnstable	1	2	-	-	-	2
Berkshire	-	493	-	2,921	-	25
Bristol	-	38	-	130	-	7
Dukes	-	-	-	-	-	-
Essex	-	7	-	-	-	1
Franklin	20	119	45	2,481	2	38
Hampden	-	111	15	126	-	7
Hampshire	-	124	-	537	-	14
Middlesex	-	22	-	840	-	3
Nantucket	-	-	-	-	-	-
Norfolk	2	10	-	58	-	3
Plymouth	21	101	50	268	-	15
Worcester	-	99	-	1,038	-	20
TOTAL	44	1,140	110	8,399	2	135

Table 4

– 3,041 acres (35%), Franklin – 2,528 acres (29%), Worcester – 1,048 acres (12%); a total of 6,617 acres, or 76%, in three counties. Also similar to FIP, of the 358 acres treated (excluding SP-44 practices), 237 acres, or 66%, were timber stand improvement practices.

Tree Assistance Program (TAP)

As a result of drought conditions during 1988, the USDA established this program to cost-share the replacement of tree seedlings planted during 1987 and 1988. Response to this program in Massachusetts has been relatively light to date, probably because of somewhat less severe drought conditions here and the lack of large-scale tree planting projects. Information on this program is incomplete at this time, but it appears that of the approximately 50 acres examined by DEM foresters under TAP, perhaps 20-25 acres will receive cost-share assistance.

Robert S. Lear
Service Forester

MANAGEMENT OF STATE FORESTS

Management Forestry Overview

The State Forests, covering approximately 263,000 acres, are managed for multiple-use forestry by eight Management Foresters and an Assistant for each. Their role is one of planning under the G.O.A.L.S. program, the administration of timber sales and other forest management programs, including road building and maintenance, boundary establishment and remarking, and a multiplicity of other activities.

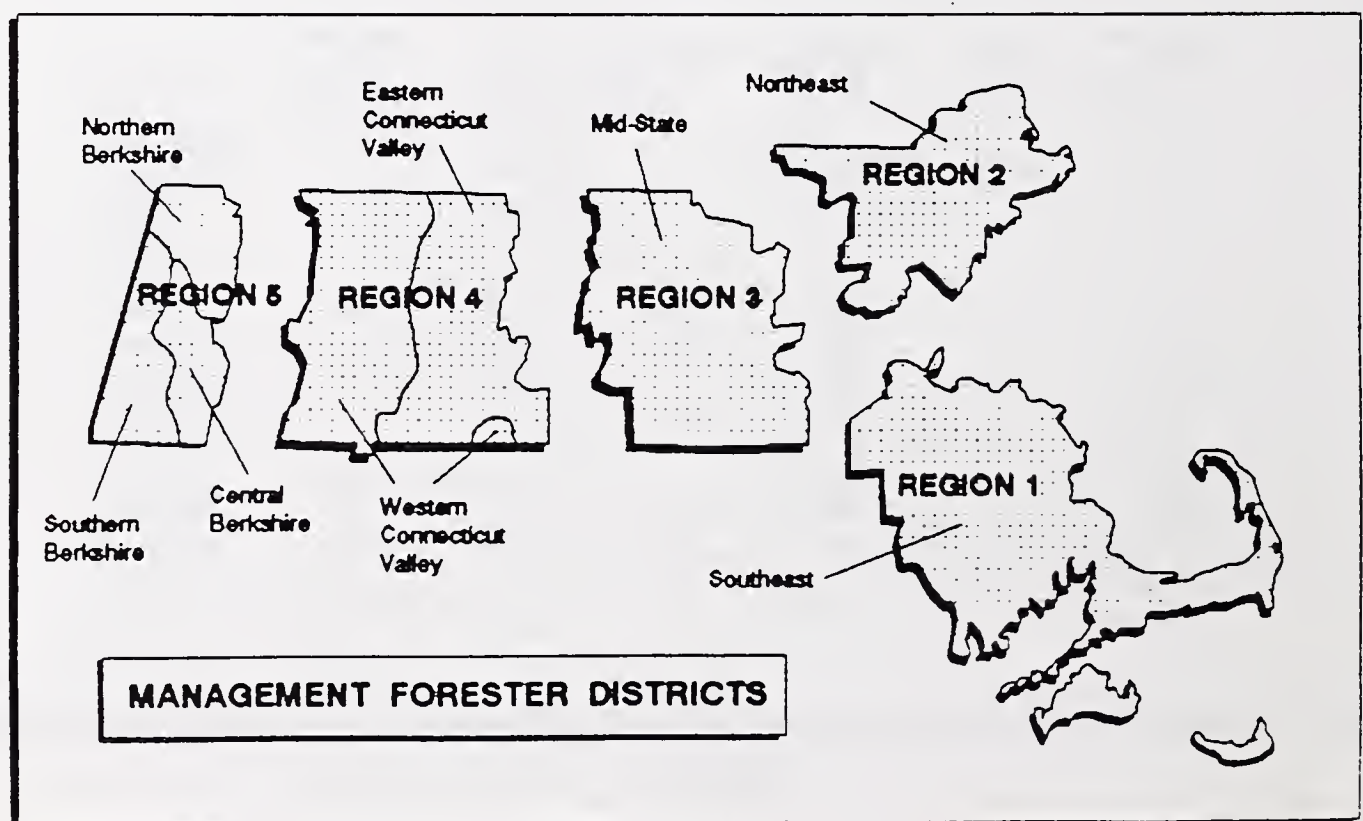
Activities other than those normally performed by Management Foresters tend to be diverse, depending on opportunities in the area served and the innovativeness of the forester. Land acquisition is an activity that varies from year to year and, when it occurs, can consume a great deal of time. Following the acquisition, it is necessary to develop management plans to integrate the new tract with existing ones. Management Foresters not only work on acquisitions within the Division of Forests and Parks but also may assist other agencies within EOEA.

Educational programs are conducted by Management Foresters on state forest land as well as in schools and at other locations. A number of State Forest tours were conducted during Forest Products Week, October, 1988. University students who undertake planning projects on state forest lands

take advantage of the experience the foresters can provide by involving them in their studies.

Management Foresters take on a number of special projects either of a short or long-term duration. They are a major source of information during emergencies that occur on land for which they have responsibility. In the case of lost persons or airplane crashes, they are on call to provide in-depth knowledge of terrain and access. These foresters represent the Commonwealth at national meetings at which management of state-owned forest lands are the topic, thus having the opportunity to provide new ideas to other states and to learn of new management concepts from their representatives.

An important source of information about forests is the periodic forest inventory conducted in the state by the Forest Service, USDA, in cooperation with the DEM. Information from the report of this survey is further analyzed by one of the Management Foresters to put it into a form more usable by all foresters in the Division, as well as private foresters and the general public. This analysis provides a basis for forest resource policy and planning in the Commonwealth. An example of this analysis is provided in this year's annual report.



COMMERCIAL SAWTIMBER AND PULPWOOD/BIOMASS SALES, FY 1989

District	Revenues Committed	M.B.F.	Tons/Cds.	Acres
Southeast (a)	\$8,208.78	100.6	2040/21	104.6
Northeast (b)	\$34,754.66	346.0	- /52	53.0
Mid-State (c)	\$12,005.00	189.0	1,514/-	90.0
E. Conn. Valley (d)	-----	(518.7)	(- /260)	(151.0)
W. Conn. Valley	\$26,689.14	289.5	- /152	62.2
N. Berkshire (e)	\$71,865.00	1,044.0	- /1075	116.0
C. Berkshire	\$139,948.54	856.8	- /221	166.0
S. Berkshire	\$271,769.93	1,072.7	- /499	281.0
TOTAL	\$565,241.05	3,898.6	3554/2020	872.8

- (a) Includes \$3,658.00 for 34.7 m.b.f. sold for M.D.F. W.; does not include 8.2 m.b.f. cut at Foxboro for inhouse use.
 (b) Does not include 12 m.b.f./10 cds. from Rich S.F. for inhouse use.
 (c) Additional 65 m.b.f. not sold.
 (d) Volume not sold due to low bids and poor market conditions.
 (e) Additional "in-kind" services est. at \$26,465. (roads - gates)

Table 5

Standing Timber Sales

Commercial Sawtimber and Pulpwood/Biomass

Stumpage sales of sawtimber were slightly higher in volume during FY89 than in the previous year. Sawtimber was at 3,899 M.B.F., an increase of 179 M.B.F. over FY88. There was also a substantial increase in pulpwood/biomass sales from 2,612 to 3,869 cords (using conversion of .52 cords per ton). The total sales revenues increased from \$536,371 to \$565,241, however the unit value declined to \$96.90/M.B.F. from \$104.64. This decline can be attributed to the large amount of wood chips harvested, which are of low quality. However, harvesting of these low-valued trees favors the remaining forest and increases its quality. Considering only sawtimber stumpage, i.e., measured in board feet, there was a slight increase in the average price received per M.B.F. - \$144.98 from \$140.41. As may be noted in the table footnotes, the volumes reported do not include substantial amounts of timber marked but not sold because bids were deemed too low.

Commercial Fuelwood

Sales of this product are of low quality material and are conducted to improve the quality of the remaining trees in stands as well as increasing their growth by reducing competition. The market for fuelwood has declined because of the continuing low cost of fuel oil and natural gas. The volume decreased slightly from 2,135 to 1,969 cords. The average price in 1988 was \$8.06 per cord and in 1989 it increased to \$10.69.

Home Fuelwood

These sales, in contrast to those in the commercial category are small ones directly to the consumer. The number of lots sold increased by 30% whereas the total volume declined by 9%. This reflects a reduction in average cords per lot from 7.2 to 5.4 cords. However, there was an appreciable increase in revenue because of the higher price per cord (\$17.31) in 1989 compared to \$11.41 in 1988. Prices paid in the eastern regions are generally higher than those in the central and western regions. In 1989 a high average price per cord (\$37.04) in the southeastern region accounted for much of the increased revenues.

STATE FOREST FUELWOOD SALES, FY 1989

District	Home Fuelwood				Commercial		
	Revenue	Cords	Lots	Acres	Revenue	cords	acres
Southeast	\$1,581.67	42.7	11	10	\$2,088.00	282	52.4
Northeast ^{1,2}	\$3,681.13	216	35	53	\$4,174.00	224	53.0
Mid-State ³	\$1,111.64	75.5	18	20	\$10,760.50	1,060	140.0
E. Conn. Valley	\$699.08	51.2	9	10	-	-	-
W. Conn. Valley	\$90.13	25.9	.3	5.6	\$4,031.78	402.6	35.6
N. Berkshire	-	-	-	-	-	-	-
C. Berkshire	-	-	-	-	-	-	-
S. Berkshire	\$60.00	6	1	2	-	-	-
Total	\$7,223.65	417.3	77	100.6	\$21,054.28	1968.6	281.0

(1) Marked 279 cds., 48 lots.

(3) Marked 148 cds., 33 lots.

(2) Marked 359 cds.

Table 6

Boundary Re-establishment and Timber Stand Improvement

One of the basic needs in forest management is clearly marked boundaries. The reason for timber trespass or encroachment by abutters is often that boundaries are not clearly delineated. Table 7 indicates that almost 119 miles were re-established by brushing, marking, and painting.

In order to improve the forest's quality and increase growth, it is necessary to remove poorly formed trees and non-saleable species in noncommercial treatments. Table 7 shows that 433 acres were treated on state forest land during FY90.

STATE FOREST BOUNDARIES RE-ESTABLISHED AND TIMBER STAND IMPROVEMENT, FY 1989

District	Boundaries Re-established	Acres T.S.I.
Southeast	12.4	54.4
Northeast	2.0	45.0
Mid-State	16.0	300.0
E. Conn. Valley	5.2	--
W. Conn. Valley	15.0	10.0
N. Berkshire	13.0	14.0
C. Berkshire	39.1	--
S. Berkshire	16.1	10.0
Total	118.8	433.4

Table 7

FOREST PRODUCTS MARKETING AND UTILIZATION

Overview

The Bureau's Forest Products Marketing and Utilization Program (FPM&U) is responsible for providing assistance in developing and locating markets for the Commonwealth's forest products and helping to achieve the highest possible utilization of those products.

The FPM&U coordinator, Doug Leab, and the M&U Forester, work with landowners, and the primary and secondary wood processing industries to achieve these goals.

The Berkshire/Pioneer RC&D Forester, Anne Marie Loud, also serves as a member of the FPM&U staff. Her activities are covered in a separate report.

Cost-Share Projects

The FPM&U program is able to provide financial assistance for marketing and utilization projects with private industries and associations on a cost-share basis.

The projects are funded with monies provided by the U.S.D.A., Forest Service, under guidelines developed by the Commonwealth, and approved by the Forest Service.

In FY89 this program provided assistance to two private enterprises and the Massachusetts Christmas Tree Association. The projects included development of local yield data for a proposed short-log sawmill and glued-up panel operation, planning and design of a dry-kiln for a small sawmill operator, and funding of a marketing hot-line for Christmas Trees.

Massachusetts Wood Power

The Massachusetts Wood Power "focused funding" Project was completed in FY89 with a study of wood biomass availability and cost in western Massachusetts. This project was designed to encourage the use of wood as an industrial fuel in the Commonwealth as a means of providing a much needed market for whole tree chips from forestry operations.

While current fossil fuel prices have depressed, interest in alternative energy sources, the project educated a number of potential users of wood biomass. As fossil fuel prices rise these companies may view wood fuel more favorably.

This year the Bureau was able to work through the Berkshire-Pioneer RC&D area to contract for a study of wood biomass potential for a proposed new power plant at the U. Mass Amherst Campus. The information was provided to the Division of Capitol Planning and Operations for use in evaluating fuel options for the proposed plant. The study, which identified a potential annual 1.8 million tons of forest biomass, has also been distributed to several other proposed cogeneration and power plant operators.

White Pine Market Development

The FPM&U program has continued to work with the Eastern Chapter of the Massachusetts Wood Producers Association (MWPA) to improve the market opportunities for Eastern White Pine lumber in the Commonwealth.

Through this focussed funding project the MWPA has developed a brochure promoting EWP as a mature and historic species with many desirable qualities to increase consumer recognition of the species.

The MWPA also purchases a booth at the Northeast Wood Products Exposition, and made space available to individual producers of EWP products, as a means of expanding the markets of these local companies.

NEWPEX

The Fourth Annual Northeast Wood Products Exposition (NEWPEX) was held in Hershey, PA, in March of 1989. This year's show sold out exhibit space for the first time and attracted over 1,500 attendees.

The Bureau obtained booth space at the show for Massachusetts wood product manufacturers. The RC&D and M&U Foresters developed a display focused on Massachusetts hardwood products and arranged for several firms to display their products and literature at the show.

The FPM&U Coordinator served as Vice Chairman for NEWPEX, Inc. and the Chief Forester serves as a member of the NEWPEX Advisory Committee.

Wood Industry Studies and Conference

The FPM&U staff served as advisor for two studies of the Commonwealth's wood products industries. The staff also worked with several agencies to develop a conference, held December 12, in Greenfield, as a means of providing study results to the industry and prioritizing study recommendations.

As a result of this meeting, the Northern Tier Project developed an ad hoc committee on wood products industry issues which continues to identify opportunities for industry assistance.

Industry Newsletter

One of the high priority needs identified by the industry studies was a regular newsletter to provide information to wood products firms.

Cooperative Extension at UMass began producing such a newsletter in the spring with assistance and article contribution from the FPM&U program. The publication, known as the "Wood Products Times" is distributed to a broad range of primary and secondary wood product firms.

Additional Projects

A wide range of inquiries about the Massachusetts forest products industries are processed on a regular basis, in addition assistance is provided to persons interested in obtaining a market for specific wood products.

With the loss of the Bureau's federal accounts' bookkeeper, and full-time secretarial help, the FPM&U coordinator has undertaken much of the Bureau's fiscal paperwork and several administrative duties. He also acts as the Bureau's contract officer responsible for administering the 03 contracts for State Lands' management, and the Yankee Forest project.

FPM&U personnel also maintain an active role in industry groups. Leab serves as Vice Chairman of NEWPEX, Inc., Treasurer of the Mass. Tree Farm Committee, a Director of the Eastern Chapter of the Mass. Wood Products Association, and on the Marketing Committee of the Northeast Lumber Manufacturers Association.

RESOURCE CONSERVATION AND DEVELOPMENT

Berkshire/Pioneer RC&D

The RC&D program represents a focused effort to promote technical advances and provide support for the wood products industry located in the four rural western counties of Massachusetts (Franklin, Hampshire, Hampden, and Berkshire). The following narrative outlines current RC&D projects and their status.

During FY89 the RC&D Forester, Anne Marie Loud, and the UMass Extension Forester, David Kittredge, designed an expanded "celebration" approach to Forest Products Week (FPW) October 1988. The goal was to create a positive image of the forest products industry and enhance public awareness of the value of all Massachusetts' forest resources. The FY88 program was successful and plans are underway for an improved and expanded program for October 1989. Publicity for this event will be accomplished through press releases, newspaper

coverage of a large scale kick-off event, wood product information printed in store circulars, public service announcements and distribution of a brochure and poster listing 40 guided activities including primary and secondary mill tours, forest management demonstrations, interpretive and recreational hikes and wildlife management tours. We continue to receive the support and interest of the entire forestry community, including both public agencies and private organizations, and are excited about the potential for a gradual improvement in social attitudes toward the forest resource and the industry it supports. Anne Marie and David Kittredge received Outstanding Achievement Awards in recognition of their efforts to coordinate Forest Product Week Activities last October.

Anne Marie distributes quarterly stumpage price survey forms to foresters and wood producers and in co-ordination with extension and state forestry

agencies in Connecticut, Massachusetts, and Rhode Island compile and distribute quarterly stumpage price summary reports. In addition, the first Southern New England Annual Forest Product Market Report was printed early this year through tri-state cooperative efforts. This report is written for and distributed to a landowner audience. It contains market price and trend information on stumpage, Christmas trees, maple syrup, export opportunities, pulp, and other forest products.

Several database files are maintained at the Berkshire-Pioneer office. First, the compilation of data collected on Ch. 132 plans is complete and up-to-date for Berkshire and Franklin Counties and is in progress for the rest of the RC&D area. Summary reports (e.g. Harvest volumes by species, town, landowner characteristics etc.) will soon be available to the industry for application to many stages of planning and decision making. In addition, licensed harvester information is entered in Dbase format and updated regularly. The computer file is used to generate mailing labels, reports, and up-to-date license lists.

Anne Marie designed a display booth and theme to promote Massachusetts hardwood products at the NEWPEX show held in Hershey, PA, during April, 1989. The display represented all product firms in a generic way and promoted about a dozen specific companies from Massachusetts who were willing to contribute products for display.

As a member of the ad hoc Wood Advisory Council, Anne Marie is assisting with the strategy for implementing recommendations stated within a recent economic analysis of the Massachusetts Wood Industry. She meets monthly with Council members and functions as staff support and co-operator with UMass extension to produce training workshops, a quarterly newsletter and industry assistance.

During 1989 RC&D saw the completion of the Fiske Yield Study, a mill study designed as a local test of the applicability of "system six" technology to Western Massachusetts low-grade hardwoods.

Ann Marie designed and presented an interpretive training workshop to train and guide DEM, MDC, AMC, and NAS interpreters toward a balanced interpretation of all the forest resources and resource management. Anne Marie also spent time attending the following workshops: The Northeastern Regional M&U Conference at LaCrosse, WI, the FIND workshop at Albany, NY, and SAF winter and summer meetings. She planned and attended quarterly RC&D Forestry Advisory Committee Meetings. Anne Marie is an officer of the Massachusetts Wood Producers Association and a steering committee member for the Yankee Division SAF and the MWPA Woodsmen's Field Day Committee.

Pilgrim RC&D

A Forest Service, U.S.D.A., Northeast Area, State and Private Forestry, Focused Funding Project was approved for the Pilgrim RC&D Area (Plymouth, Bristol, Barnstable, and Island Counties) with the purpose of retaining forests in this area. Although the project is concerned with all forest owners, it is particularly focused on the cranberry bog owners and their related forest resources.

Susan Campbell, a 1989 graduate of the Yale School of Forestry and Environmental Studies was hired as the Forester. She will start in mid-July of FY90.

FOREST RESOURCES PLANNING PROGRAM

Overview

The primary goal of the program is to prepare, implement, and update the Massachusetts Forest Resources Plan. This Plan provides policy and program direction for the Division of Forests and Parks and also the Commonwealth's portion of the Federal Forest and Rangeland Renewable Resources Planning Act (RPA) efforts. The program is directed by Dr. Muriel E. More.

GEIR

During FY89 program efforts focused on preparing the Division's Generic Environmental Impact Report (GEIR) on forestland management practices. According to the Massachusetts Environmental Protection Act (MEPA) regulations, the Division must periodically update its GEIR of forest management practices on Division lands. While past GEIRs have dealt only with forest management practices on Division properties, the current effort is also examining the impacts of timber harvesting of private forestland on water quality. The GEIR is scheduled for completion in June, 1990, following an eight-month extension recently granted by MEPA.

In November, 1988, James Soper, Service Forester, was temporarily assigned to the Forest Planning Program to work full-time on the GEIR. Mr. Soper has made substantial contributions in research and writing on the Draft GEIR and also coordinated a major data gathering effort that assessed the use and impacts of off-road vehicles (OVRs) on logging

roads for plans filed under the Ch. 132 Forest Cutting Practices Act. In addition, he continued to administer federal grants and accomplishment reporting for the Bureaus of Forest Development, Fire Control, and Insect Pest Control and Shade Tree Management.

In 1987, to assist the Division with the GEIR, MEPA established a fifteen-member technical advisory committee (TAC) which formed four sub-committees to deal with specific aspects of the project. These aspects include water quality, the Ch. 132 Forest Cutting Practices Act Program, the state lands management forestry program, and the use of ORVs on logging roads. Three of the sub-committees are chaired by Division personnel; Douglas Poland, Regional Forest and Park Supervisor (Statelands sub-committee), Charles Dane, formerly Chief, Bureau of Recreation, now Director of the Division of Forests and Parks (ORV sub-committee), and Joseph Smith, Service Forester and Statewide Ch. 132 Coordinator (Ch. 132 sub-committee). In addition, eleven other Division administrators and foresters are serving on the four sub-committees. Collectively, these individuals provided approximately 250 days of work on the GEIR in FY89. Major program highlights during the year included completion of all research studies and sub-committee reports which are primary components of the GEIR. Major program emphasis for the next fiscal year will focus on completing and circulating the Draft GEIR for TAC and public review and preparing the Final GEIR for submission to MEPA.

OTHER PROJECTS AND NEWS

Wildlands Program

Chief Forester Thomas Quink and Management Foresters Darrell Keay, Austin Mason, Conrad Ohman, and William Rivers have been members of the DEM Natural Areas Committee over the last two years. This committee, composed of administrators, foresters, planners, and private citizens developed policy for the recently announced Massachusetts Wildlands Program.

The program has two components: Representative Natural Areas (RNAs) and Backcountry Areas. RNAs preserve and maintain representative plant communities and geologic features for research and baseline monitoring. Backcountry Areas provide quality recreational experiences to those seeking solitude in this heavily populated state.

To date, over 4,400 acres have been designated under this program and a guidebook describing them has been printed. A number of other nominations are being considered for inclusion in the system.

Bill Rivers
Management Forester

Information Management

The database for forest cutting plans under Ch. 132 continued to be developed and improved by Mike Fleming, Service Forester. It is not fully enough developed to make it available to the regions at this time.

Anne Marie Loud, Berkshire/Pioneer RC & D Forester, completed the harvesters' license database. All issued licenses are now entered into the database and up-to-date lists are regularly provided to the regional offices for us by Management and Service Foresters.

Training in the use of computers was taken by two forester, C. Ohman and M. Fleming. In general, this is advanced training to further the application of computers to record keeping on a state-wide and regional basis. Region I. staff received training from J. Perry on the use of the computer for word processing (Microsoft Word) and regional budgeting. Computer use by the forestry staff is increasingly a common occurrence.

Bill Cote, Assistant Management Forester, Western Conn. Valley, continues to serve as the Division's advisor for matters relating to microcomputer usage and troubleshooter when EDP problems occur.

Joseph Smith
Service Forester

Personnel

Jon Breed, Marketing and Utilization Wood Technologist came on board in July, 1988, filling the position vacated by Tracy Kramer. Jon left state employ during June of 1989 for a position with Wood Fabricators, Inc. of Billerica, manufacturers of wooden trusses.

Johnna Desautels, Bureau Clerk in the Boston office, left during late November, 1988, for a clerical position in a Worcester law firm. Ellen Murphy, Region III Forestry Clerk, joined Johnna at the same law firm in late February, 1989.

Region V Forestry Assistant, Steve Hubner, left state service in latter January, 1989, to take a civilian position with the Department of the Navy. Based in Virginia, Steve is responsible for managing lands associated with U.S. Navy bases.

James Soper, Eastern Franklin County Service Forester, and Richard Valcourt, Region III Forestry Assistant, were temporarily reassigned. Soper will assist Forest Resources Planner Muriel More with developing the Generic Environmental Impact Report for the Department/Division. Valcourt will take on the duties of Eastern Franklin County Service Forester.

Forest Tree Improvement

The Bureau of Forest Development continues to cooperate with University and U.S.D.A. Forest Service Research Experimental Plots. The Bureau maintains records on the various experimental plots and has offered researchers assistance in planting, maintenance, and data collection.

Work began this year on the development of a tree improvement project that will focus on Southeastern Massachusetts Forests. Chief Forester, Thomas

Quink, and Foresters Austin Mason and Michael J. Fleming met with Leroy Johnson of the U.S.D.A. Forest Service in June to discuss the development of this project. This project will identify genetically superior white pine from which seed will be collected and germinated. Hopefully, funding can be secured to expand the Amherst Nursery to implement this project.

Michael J. Fleming
Service Forester

Yankee Forest Cooperative Project

The YFCP is a "Focus Funding Project" through a grant from the Forest Service, USDA, Northeast Area, State and Private Forestry. It is a three-state cooperative of Connecticut, Massachusetts, and Rhode Island that undertakes a variety of programs to increase public awareness in the appreciation and management of forest resources. The project also has the objectives of improving the quality of these resources, providing for improved timber harvesting and utilization and to increase economic stability in that portion of the three-state region to which the program is focused.

Two foresters, Rex Baker and Marc Tremblay, were employed in the YFCP for half of the fiscal year and only one for the remainder. Marc Tremblay accepted employment as a forester with the Providence Water Department in mid year. There was an active program conducted to carry out the the YFCP objectives in all three states. A summary of major activities follows.

Forty-one new contacts were made with forest landowners, predominantly in Rhode Island, covering 2,675 acres. Twenty-four forest management plans resulted. In addition, eight plans were updated from earlier contacts. Tax records in seven southern Rhode Island towns were examined in order to identify forest landowners, resulting in 966 names. Direct mailings were made to 368 of these landowners in three towns. Also in Rhode Island, organizational meetings were held to form a landowners association.

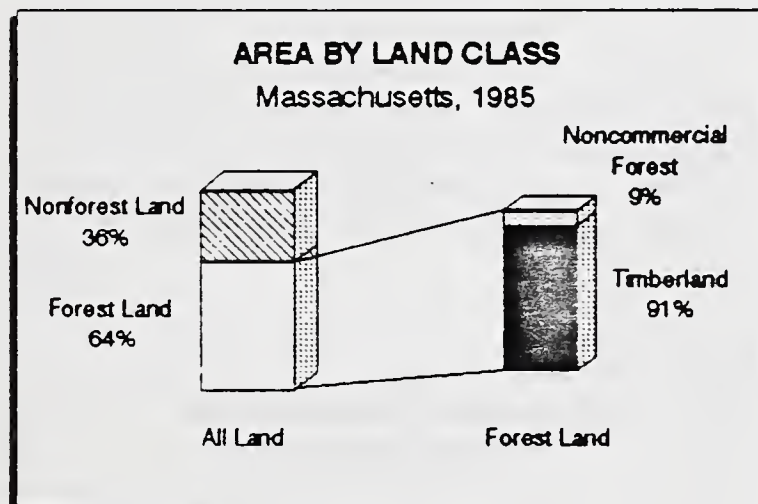
Field trips were conducted for 280 Junior High school students and two tours of municipal forests were held. Presentations about the YFCP were made to officials in 11 municipalities having 756 acres of municipally-owned land. Four conservation commissions were included in this group. A demonstration area for clearcutting to illustrate site conversion was established and a YFCP exhibit was manned at four all-day meetings or fairs.

The "Secondary Wood Products Manufacturers Directory, 1988" for the three states was completed and mailed to primary producers and other perspective users of this information. An Urban and Community Forest newsletter was printed and distributed. Promotion of the Yankee Forest Cooperative project was continued with the assistance of the public relations firm of Creamer, Dickson, and Brasford.

Richard Johnson
Service Forester

FOREST SERVICE SURVEY 1985 UPDATE

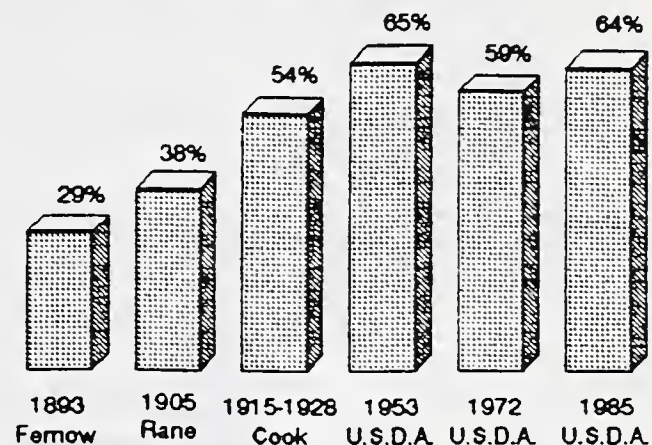
In 1985 the Bureau of Forest Development assisted the Forest Service, U.S.D.A., Forest Inventory and Analysis Unit in conducting the fifth inventory of Massachusetts' forests in this century. The data from that survey became available in 1989. Since the first survey in 1905, which was only a canvass of local assessors, the methods have become increasingly more sophisticated and the results more precise. The first attempt at gathering detailed information relating to timber characteristics was in 1953. A number of interesting things have taken place since that inventory.



To appreciate our present forest one must remember that at the turn of this century Massachusetts was only about one-third forested. Since that time, even though the forest has endured a number of calamitous events, most notably the Hurricane of 1938 and the Chestnut Blight, it has increased to the point where 64% (3,225,000 acres) of the Commonwealth is now forested, of which 2,929,400 acres is considered timberland. Extensive development has not necessarily resulted in a loss of forest land, but rather in a significant reduction in the size of timberland ownerships and a tremendous increase in the number of persons holding smaller ownerships.

The reported timberland acreage is a slight increase over the 1972 estimate of "commercial forest land" (the terms are synonymous). This slight increase (some of which can be attributed to reclassifying portions of Barnstable and the Island Counties to timberland since the 1972 survey) is encouraging, since between the 1952 survey conducted by the U. S. Forest Service and the 1972 survey there was a slight

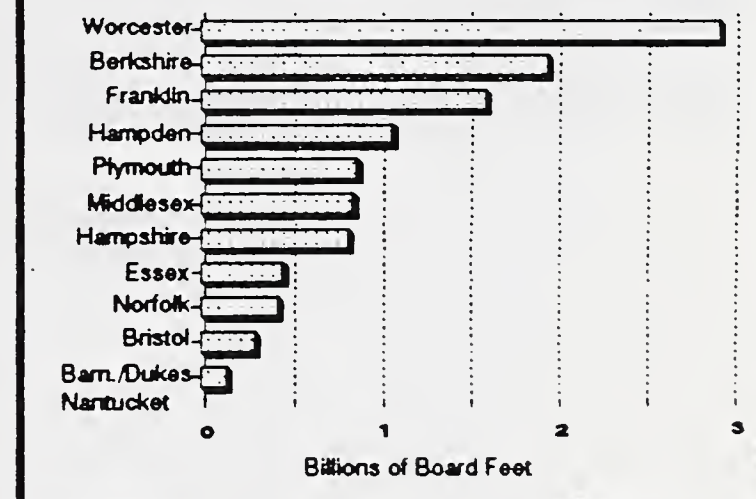
PERCENT OF TOTAL AREA IN FOREST LAND Massachusetts, 1893 - 1985



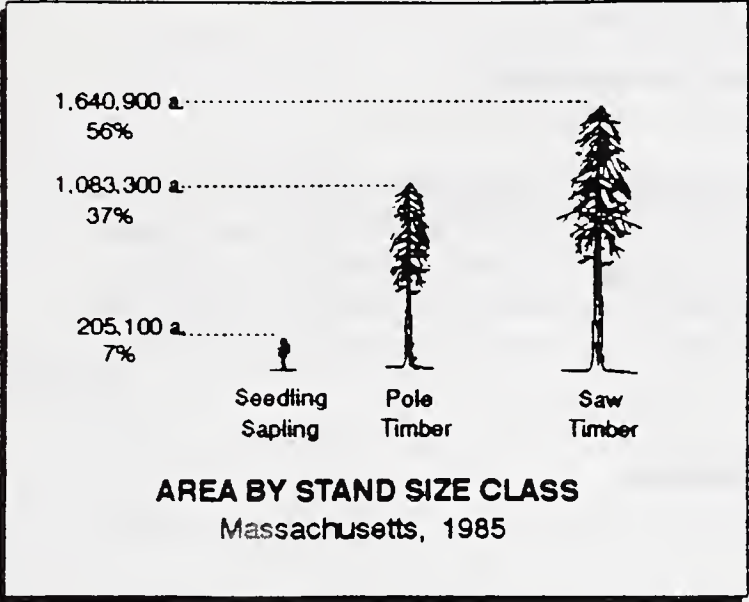
decrease in the amount of commercial forest land.

Franklin (78%) and Berkshire (75%) are the most heavily forested counties. Excluding Suffolk County, Essex (36%) and, collectively, Barnstable, Dukes and Nantucket Counties (37%) have the lowest proportion of timberland. Worcester County has 20% of the State's sawtimber volume and is also the State's largest county (22% of total timberland acreage).

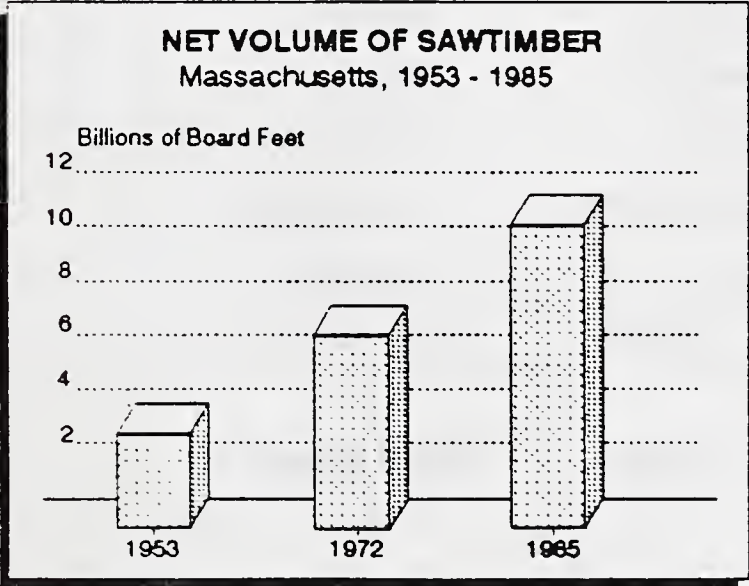
SAWTIMBER VOLUME BY COUNTY Massachusetts, 1985



Of the nearly 3 million acres of timberland, 56% is of sawtimber size and 37% poletimber. Only 7% of the acreage occurs in seedling and sapling stands. It is a forest that lacks a diversity of age classes and, because of this, is extremely vulnerable to our region's infrequent, though devastating, hurricanes and insect infestations.

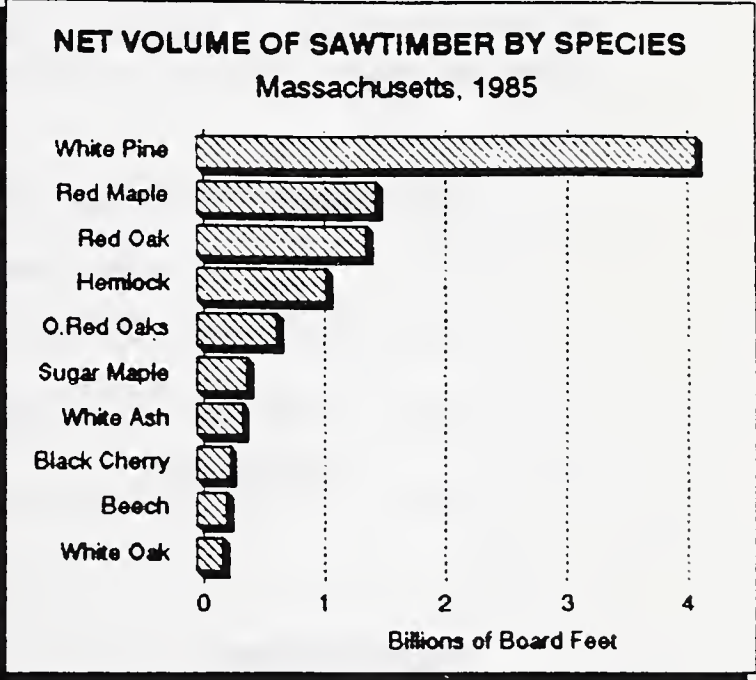


Because of the ever-increasing maturity of the forest, the net volume of sawtimber has increased significantly. Though the 1953 data are not directly comparable to today's, the volume of sawtimber has shown a steady increase from 3.459 billion bd. ft. in 1952 to 7.317 billion bd. ft. in 1972, to 11.457 billion bd. ft. in 1985.



The species occurring in Massachusetts' forests are as diverse as the sites they grow on - from the limestone ridges of the Berkshires to the droughty sands of Cape Cod. However, only five species (w.pine, r.maple, n.r.oak, hemlock, and other red oaks) account for 76% of the total sawtimber volume. White pine has always shown the greatest volume, while red maple has edged its way into

second place over northern red oak. Among the top five species, red maple and hemlock, both shade tolerant species, have shown the greatest gains. A low ratio of removals/growth caused, in part, by poor markets for these species has resulted in their substantial gains.



Increasing the quantity and quality of Massachusetts' forests (M.G.L. Ch. 132 Sec. 40) presents the Bureau of Forest Development with a tremendous challenge. This is especially true as these forests become more fragmented by rapidly changing ownership patterns and greater and more diverse demands are placed on them. The Bureau's future focus will utilize the wealth of data from the forest inventory to increase its ability to fulfill this obligation.

Bill Rivers
Management Forester

Revenue Summary
Bureau of Forest Development

Revenues to the Bureau of Forest Development are derived from several sources. The major source is timber sales from State Forest lands. The figures in this tabulation are higher than those in Table 5 and 6 because they represent, in addition to cash flow, in-kind services performed in conjunction with timber harvesting, e.g., road building or timber stand improvement, and the value of timber for in-house use. Other sources of income are listed, including those derived from federal grants.

State Forest and Service Forestry Income

Timber Harvester Licenses	\$9,735.00
Forest Product Sales ¹	\$593,757.05
Chapter 61 Tax Law Filing Fees	\$8,989.03
Rents/Leases	\$34,179.50
Subtotal	\$646,660.58

Federal Grants

RC&D (Resource Cons. & Development)	\$20,000.00
RFA (Rural Forestry Assistance)	\$24,325.00
FRP (Forest Resources Planning)	\$2,198.00
FIP (Forest Incentives Program)	\$4,066.00
ACP (Agricultural Conservation Program)	\$11,594.00
Yankee Forest Cooperative	\$38,000.00
Subtotal	\$100,183.00

Total \$746,843.58

¹ Includes in-house timber use value of \$2,051, and in-kind services of \$26,465.

ANNUAL REPORT

Fiscal Year - 1989

Bureau of Fire Control

Antonio Castro, Chief Fire Warden

Patsy Bisceglia, Asst. Chief Fire Warden

INTRODUCTION

Fiscal year 1989 was the most challenging year the Bureau of Fire Control had to endure in quite a long time. Budget restraints created problems in filling 7 permanent year round positions and hiring 56 seasonal personnel to man towers and to drive fire apparatus. This created a real hardship not only for the Bureau but also for many of the rural fire communities who rely on our forest fire suppression support. After numerous exploratory budget sessions we were able to hire 29 seasonal tower observers to man our towers in the spring with expectations of hiring the seasonal truckmen in the new fiscal year.

Our ability to train our new seasonal personnel and personnel representing other Bureau's alleviated the seriousness of the manpower shortage which exists. We also embarked on training personnel from the Metropolitan District Commission in the North Shore and the Quabbin area. We can get dependable assistance from the MDC whenever fires occur on their properties.

Due to the late hiring of fire tower observers many training sessions had to be held to familiarize the new personnel in fire detection techniques, use of alidades, proper techniques in triangulating with adjacent towers and familiarization with local fire



departments fire chiefs and forest wardens.

We anticipated a very dangerous fire season due to a very mild winter in which there was below average precipitation. Our fears were abated when weather conditions during the early spring negated the fire danger indicator that predicted severe fire conditions.

The Bureau was restricted in submitting any expansion items in its budget due to lack of maintenance dollars and lack of dollars in replacing aging vehicles. Five fire districts are without fire cruisers and district patrol trucks are beyond repair. Our excess property program has played a major role in keeping all our fire districts with sufficient emergency response vehicles.

With authorization granted us by the U.S. Forest Service we will be able to supplement our staff with a much needed fire training officer who will be able to organize and perform many training sessions which need to be administered. Fourteen of our fire personnel are Red Carded (federal requirements) to fight forest wildfires in the western states.

This past fall we had 5 fire personnel participate in wildfires ranging in the Dakota's and Utah National Forest areas. The Bureau is not authorized to legally dispatch personnel out of state beyond the COMPACT region. There has been a bill pending in the legislature for several years asking for this authorization. The men responded on their own personal leave time and served as federal employees.

Another important area of forest fire awareness is our Smokey the Bear Prevention Program. Smokey once again was invited to Fenway Park to spread his prevention message and had the honor to throw the first pitch.

Smokey also had his annual visit with the Governor to honor once again the Smokey Bear Poster Contest winners. Contestants, parents,

grandparents, brothers, sisters were greeted warmly by the Governor. The winners received \$50.00 dollar savings bonds and citations for their achievements.

Smokey's annual participation at the Eastern States Exposition in W. Springfield plays a major role in spreading his wildfire prevention messages. Over 800,00 people visit our state's exhibit annually.

PREVENTION

SMOKEY BEAR POSTER CONTEST

The Bureau of Fire Control in cooperation with the Massachusetts Federation of Garden Clubs sponsor a Smokey Bear Poster Contest through-out the states many school districts. Over 3,500 youngsters from kindergarten through high school compete for five awards. Included is an award to a girl or boy enrolled in special education classes. Also, we recognize an adult and a senior citizen category. Winners selected in Massachusetts compete for Regional and National honors.

The reward for the seven category winners is a visit with the Governor at the State House. Children and their parents and grandparents have a rare opportunity to meet the Governor and Smokey Bear. The contestants receive citations and awards commemorating their winning poster. In order to attract youngsters in the junior and senior high schools the Department presents a \$50.00 savings bond to the five category winners. The Governor also reads a proclamation in Smokey's honor for that day.

Smokey's presence with the Governor each spring in passing out awards and citations to the poster winners has proven to be one of the most successful methods in promoting Smokey's "Forest Fire Prevention Program." Each year we are reaching out to more Garden Clubs to participate and also increasing school children and senior citizen

participation.

In Fiscal '89, 34 schools and 3,625 contestants prepared posters to be judged. Most of the schools and participants are in the eastern part of the state. We are trying to spread more participation westward.

1989 POSTER WINNERS AND SCHOOLS

Kindergarten - 2nd Grade - Andrew Waitkeevich - West School, Plymouth

3rd - 5th Grade - William Thibeault - Pine Hill School, Sherborn

6th - 8th Grade - Simone Carlisle - Memorial School, Hull

9th - 12th Grade Shaun Branigan - South School, Plymouth

Special Education - Kendra Charbonnier - Harrington School, Chelmsford

Adult - Annette Dube, Ipswich.

Senior Citizen - Dorothy Didham, Wakefield

Mrs. Linda Jean Smith of Chelmsford's Jr. Garden Club was this year's Smokey Poster Contest Chairperson.

The Bureau of Fire Control personnel received many requests to visit elementary schools throughout the year. With Smokey in attendance our personnel presented many seminars pertaining to fire prevention in an educational atmosphere. This program has proven very beneficial in acclimating our younger generations in the practice of fire prevention at a most critical stage of their inquisitive life.

In Fiscal 1989 Smokey performed in 254 schools and participated in 324 Civic functions. We were able to reach approximately 8,500 young elementary school children. Our programs were also administered to older citizens and community functions. Smokey still provides a great deal of excitement at parades and community functions and at the Big "E".

In Fiscal 1989 we asked our fire personnel who participated in the prevention presentations to give us an estimate on the amount of people

served (without including the Big "E") was 1,002,823. This is quite an extraordinary figure considering the worn out conditions of all our Smokey the Bear suits.

We participate in parades, fairs, safety seminars, poster contests, dedications of parks and community sites and many other programs where Smokey's prevention message reaches the public.

THE BIG "E":

Every fall during the Big "E" fair in W. Springfield, Smokey's presence has always played a major role in the Departments exhibit area. Every fire district in the state contributes a certain amount of effort with Smokey in order to make this a very special event. Over 1 million people from all over New England gather to view the exhibit.

BARNSTABLE COUNTY FAIR

District 1 fire personnel annually present "Smokey Bear" at the Barnstable County Fair for a period of five days. Over 200,000 people received his prevention messages.

Smokey also was present at the parade in Cotuit and two days at Otis Air Force Base during their open house.

SMOKEY AND THE PRO'S:

The U.S. Forest Service initiated Smokey and the Pro's Fire Prevention Program on the west coast in 1984 with many of the pro baseball, football and basketball teams. This past fiscal year the Bureau was asked to participate in this fine fire prevention program.

Once again Smokey Bear was honored at Fenway Park to participate in "Smokey and the Pro's Fire Prevention Program at the ballpark. On September 10, 1988 the Boston Red Sox in cooperation with the Department of Environmental Management, the U.S. Forest Service and the National Association of State Foresters sponsored this event.

The Assistant Chief Fire Warden once again was the Event Manager. District Fire Wardens from Barnstable, Plymouth, Bristol, Norfolk, Essex and Middlesex counties along with fire personnel assisted in staging this spectacular event.

Representatives from the U.S. Forest Service, the State of New Hampshire, Vermont and Rhode island participated.

Smokey Bear presented awards to Jim Rice and Lou Gorman of the Boston Red Sox.

School binders with Smokey's logo and the Boston Red Sox logo were passed out to youngsters 15 years old and under. Over 15,000 youngsters received Smokey's prevention messages.

The Grafton Fire Department honor guard and Boy Scout Troop #31 from Rochester, MA. participated in the distribution of prevention material.

FOREST FIRE VIOLATIONS:

Another important prevention program is the issuing of criminal citations and warnings to individuals in violation of the Massachusetts Forest Fire Rules and Regulations and M.G.L. Chapter 132 pertaining to Forest Cutting Practices. We witnessed 219 fire and logging violations in fiscal 1989. We issued 82 written warnings. District 10 issued 32 written warnings along with 16 for District 4. This past fiscal year the Bureau issued 21 stop orders.

The inspection of logging operations takes up a great deal of the District Fire Warden's and Forest Fire Patrolman's work day. The new Forest Cutting Practice Law has increased the responsibility of these key personnel. In Fiscal 1988, we had 3,032 logging inspections. This past year we inspected 2,498 logging sites. District 12, (526 inspections); District 9 (456 inspections); District 11 (334

inspections); and District 7 had (263 inspections).

The inspection system serves a two fold purpose; it establishes uniform fire minimizing standards with loggers; it also familiarizes our fire personnel with fuel conditions and terrain they might not ordinarily be familiar with.

FIRE PREVENTION WEEK:

During Fire prevention Week in October the Bureau prevention team with Smokey Bear play a very important role by coordinating fire prevention activities with many cities and towns in the Commonwealth by attending Fire prevention programs in schools, elderly housing units, parades and distribution of Smokey Bear prevention materials.

SUPPRESSION

The Bureau is mandated by law to assist rural fire communities in the suppression of wildfires. On many occasions during multi-alarm fires, our personnel not only assist in the suppression of wildfires but also will man fire stations to assist in dispatching fire information to other towns if the need arises.

Our fire tower detection system relays to the rural towns exact locations of fires detected which creates an immediate response situation to the emergency. This immediate response of fire apparatus to the scene minimizes the danger to lives and property.

The following fire statistics reflects the important role the Bureau plays in the overall scope of detecting and suppression of wildfires in the Commonwealth. Without the Bureau's professional firefighting assistance to the many cities and towns in the Commonwealth, the loss of valuable forest and timber products would be catastrophic. Other routine functions were also performed in conjunction with suppression activities.

	<u>FY 1988</u>	<u>FY 1989</u>
Fires detected by towers	1,798	1,624
Fires Reported	5,721	7,569
Acres Burned	8,164	9,099
Miles Patrolled	542,749	568,117
Assists to Cities and Towns	581	416

Fire Classifications*

FIRES

	<u>FY 1988</u>	<u>FY 1989</u>
A. .25 acres or less	3,564	4,831
B. .26 acres to 9.9 acres	2,032	2,599
C. 10 acres to 99.9 acres	119	130

D. 100 acres to 299.9 acres	05	09
E. 300 acres to 999.9 acres	01	
F. 1000 acres to 4999.9 acres		
G. 5000 acres or more		

Total Class Fires	<u>5,721</u>	<u>7,569</u>
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*See charts for fire trends.

DETECTION

The detection system in Massachusetts is still provided by a combination of aerial observation and ground observation stations. In the counties east of Worcester county, ground observation stations are maintained and operated by the Commonwealth. This system is backed up during periods of high fire danger in Plymouth and Barnstable Counties by county supported planes. In the western counties and including North Worcester County, a combination of ground observation and aerial observation is utilized and supported entirely by the state.

The past Flight pattern for DEM, Region III, South Worcester County, has been eliminated in order to increase the frequency of aerial detection flights over Northern Worcester County which has a high forest fire frequency. There were two additional towers manned in South Worcester County in order to shorten flight patterns. Flight patterns #3 limitations include West Boylston to Fitchburg, northwest to Royalston, and south to Hardwick, all in the Northern Worcester County area.

Flight pattern #4 in Franklin, Hampshire and Hampden Counties, DEM, Region IV has been similarly condensed from an "A" type aerial flight pattern to a rectangular flight pattern. This extends from Russell in Hampden County, north to Leyden in Franklin County, and proceeds south to Blanford in Hampden County.

We spend considerable time training fire tower observers to pinpoint the exact location of fires. This vital information is relayed to the rural fire dispatchers who in turn activate the suppression forces in their particular town.

The Bureau plays a very important role in assisting many small rural communities in all types of wildfire training. Immediate detection and response to incipient wildfire contributes to the

reduction of acres burned and property lost.

The Bureau's Forest Fire Patrolmen logged a total of 568,117 miles. This reflects an increase in patrolling activity of 25,638 miles from fiscal 1988. Due to a relatively quiet spring fire season and the condition of many of our fire vehicles our patrolling activity remained pretty stable. Inspections under Chapter 132 Forest Cutting Practice Act was down 534 inspections. The inspections play a major role in patrolling statistics.

FIRE TOWER DETECTION

The state is divided into 13 fire districts. Forty-three active Fire Observation Towers are located in strategic elevated areas throughout these districts. Our tower observers offer the rural fire communities an invaluable asset in detecting forest fires immediately after ignition. This past fiscal year our fire towers detected 1,642 forest fires. This reflects a decrease of 156 detected fires from FY 1988. Fires reported by communities totaled 3,732 fires. This reflects a decrease of 1,989 reported fires from FY 1988 by rural fire communities. Overall detection by towers, aircraft and other sources totaled 3,623 fires. FY 1989 started very aggressively in the late summer and fall. A very light snow fall this winter did not really materialize into an active spring fire season.

Immediate detection of forest fires and rapid reporting procedures to rural fire communities is a valuable asset in the reduction of costs to suppress the fires and the preservation of life, property, wildlife and forest resources.

Active towers in fire districts 1,2,3 and 4 in Region I and towers located in Region II fire districts 5, and in Region III district 7 reported 1,430 fires to their respective rural community fire departments.

FIRE CONTROL ACTIVITY STATISTICS

<u>Activity</u>	<u>FISCAL YEARS</u>					
	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Miles Patrolled	460,465	616,570	498,325	436,029	542,479	568,117
Logging Inspect.	1,876	2,793	3,381	2,622	3,032	2,498
Fires Detected:	1,624	4,773	4,401	2,049	3,919	3,623
(Towers)	1,619	3,662	3,160	863	1,798	1,642
(Aerial)	5	9	6	23	67	60
(Other)	0	1,102	1,235	1,163	2,054	1,921
Prevention Programs	591	617	632	763	590	578
Acres Burned	5,168	13,777	9,110	3,418	8,164	9,099
Fires Reported	5,302	7,755	6,162	2,912	5,721	3,732
Truck Runs	350	751	416	271	804	544
Forest Fire Violat.	211	247	412	83	364	135
Ch. 132 Violations	364	253	183	102	130	84
Ch. 132 Cut Plans	1,094	1,123	816	591	644	577
Assts Cities & Towns	975	1,430	1,680	387	581	416
Miles of Access						
Roads (Services)	270	232	336	205	256	174
Training Programs:	635	1,008	771	527	362	340
(In-house)	425	672	495	424	256	200
(other)	210	336	276	103	106	140
Assistance to						
Other Bureaus					16,294	20,298
(Manhours)						

TRAINING

TRAINING OF BUREAU AND DIVISION PERSONNEL:

A "Record of Training" is being maintained by all District Fire Wardens for each individual trained to fight forest fires.

Training is an on-going, never ceasing requirement in all types of fire fighting. Due to personnel turn-over in the Bureau, training is a prerequisite to effective fire detection, prevention and suppression techniques. The safety of employees and the general public is of high priority.

In fiscal 1989 restraints were put on all Bureaus in hiring seasonal personnel for the spring and summer season.

The Bureau was authorized 29 fire tower seasonal positions and no truckman seasonal positions until after June 24, 1989. This placed a great strain on our detection and suppression forces.

Training seasonal personnel has always been difficult because not all candidates for the fire positions are fire oriented.

We spent considerable time training division personnel who were in the system already.

Our spring fire season was not as active as previous years, but our fire towers were manned with trained observers and our suppression forces responded to forest fires with trained truckmen.

METROPOLITAN DISTRICT COMMISSION EMPLOYEE TRAINING:

Many fires occur on MDC property during the course of the year. The Bureau has always responded to the fire emergencies on their property.

For the past two years our training committee programed MDC personnel into training sessions, both hands-on training and classroom training.

Hydraulic training and moving water in all types of terrain is very important when called upon to fight wild fires.

On June 21, 1989 twenty-five (25) MDC personnel participated in a water handling hands-on and classroom training seminar at the Quabbin Reservoir in Windsor, MA.

MDC TRAINING (CONT.)

The following topics were discussed and demonstrated at the all day session:

1. Hydraulics - water moving from one point to another.
2. Hose, fittings, and nozzles.
3. Types of pumps; centrifugal, rotary and piston actions.
4. Operation of pumps - Mark #3, BB 4's and Floatation.
5. Hose laying and tandem pump

PUMP AND WATER HANDLING TRAINING:

On June 20 and June 21, 1989 two training sessions in Handling Water and use of the Mark #3, BB 4 and floatation pumps were performed at Ashland State Park and the Quabbin Reservoir.

Fifty-nine Bureau personnel received intensive training in the knowledge of hydraulics, pump operations, tandem pumping, types of nozzles, hose, fittings and proper laying of hose long distances.

Our Bureau personnel performed 200 in-house training sessions and 140 training sessions with other state agency personnel and Rural Fire Community personnel.

Types of training vary in different districts. Each part of the state has its unique topographical landscapes. In the South-eastern part training employees is placed on handling of Brushbreakers and all-terrain vehicles because of the sandy soil. Laying hose and fighting forest fires is performed while trucks are moving.

In the central and western part, hilly terrain puts a different perspective on fighting wild fires. Also, moving water up steep grades needs tremendous training activity. Use of helicopters in fighting inaccessible areas is very effective.

On the northeast section, urban-rural interface training is a very important training technique because the area is highly populated and structures are scattered in dense wooded areas. Also, many water sheds have to be protected from sustained fires.

RED CARD AND GREEN CARD TRAINING:

Red Card. qualifies personnel to fight out-of-state fires on federal lands. Green Card qualifies personnel to fight fires with the COMPACT states. Standards for each are very similar. To qualify, fire fighters have to take the S-130 Basic Firefighter Course and S-190 Introduction to Fire Behavior Course.

RED CARD AND GREEN CARD TRAINING (CONT.)

Both courses were presented at the Fire Academy on October 25-27, 1988. David Crary, a graduate student from U. Mass Forestry Department was the instructor. A physical stress test is also required to be certified. Thirty-four candidates enrolled and only fourteen were Red Carded. Each year a physical stress test is required to successfully maintain the Red Card.

OUT OF STATE FIRE FIGHTING

On August 16, 1988 a call came from the National Interagency Fire Center in Boise, Idaho requesting assistance from our Bureau to help suppress wild fires in North Dakota. Five of our personnel joined crews from New York, Connecticut, Rhode Island, Vermont, New Hampshire and Maryland. Two weeks were spent fighting fires in Custer National Forest and Yellowstone National Park. Without our "Out of State" fire fighters authorization, personal vacation time had to be used by the men. We are the only State without this authorization.

TRAINING OF IN-MATES

On June 20, 1989 DEM in-mate crew supervisors from Myles Standish S.F. and 20 in-mates from MCI Plymouth were given basic forest fire suppression courses to combat forest fires in Plymouth County. There were four 6-hour sessions in handling of pumps, laying hose, fire line safety, use of pump cans and working with brushbreakers.

CONTROL BURN AT OTIS AFB

On March 23, 1989 the Bureau took part in a control burn at the Otis Air Base impact area. Fire personnel from Districts 1, 2 and 3, two patrol trucks, and three brushbreakers from District 1 and District 2 assisted the Otis AFB FD, the Sandwich FD, Bourne FD, and the Onset FD in securing the perimeter of the fire.

During the course of the day 750 acres were successfully burned without any incidents. Winds and temperatures played an important part in maintaining a smooth constant burn.

Without a control burn in the early spring usually a fire will ignite in the area due to heavy artillery shelling and rocket shelling. If a fire ignites in this area in April or early May, weather conditions are conducive to a raging wild fire threatening hundreds of acres of forest, human life and personal property.

BRUSHBREAKER TRAINING:

Professor Dr. William Patterson III from the University of Massachusetts Department of Forestry and five graduate students were trained in the proper use of brushbreakers, pumps, and running hose lines while moving through brush and timber in fighting wild fires on Cape Cod.

Dr. Patterson requested this training to better understand forest fire suppression techniques in the Cape area.

EMERGENCY AND DISASTER TRAINING:

One day per month training seminars are held at the Civil Defense Hdqtrs. in Framingham for the purpose of coordinating resources, training and operations in the event of a major disaster caused by human or natural situations.

The Assistant Chief Fire Warden attends these monthly training sessions as the liaison for the Department, which is required under Executive Order #144 signed in 1978 by the Governor.

Training sessions include Departmental responsibility to the Civil Defense Agency in the event of hurricanes, nuclear accidents, earthquakes, blizzards or any other disaster which may threaten lives and property. Scenario's of disaster situations are simulated and response by agency liaisons are recorded during these sessions.

MYLES STANDISH CONTROL BURN:

On April 12, 1989 fire districts 1, 2 and 3 participated with a crew from the University of Massachusetts Forestry Department in a prescribe control burn in Myles Standish State Forest. Only two acres of brush and native vegetation was burnt.

Dr. Patterson from the University headed up the team of fire personnel attending. Ten Bureau personnel from Districts 1, 2 and 3, and nine students of Dr. Patterson's were on hand along with three brushbreakers, four patrol trucks and one tanker.

Types of fuels were documented and the effect weather has at ignition and during burn time.

Future studies will be made by the University team to see how long a period rejuvenation of vegetation growth occurs.

The prescribe burn had a two fold purpose:

1. Record the different types of fuel and vegetation growing in the area. Measure the effect weather has on conditions when ignited, and what other factors in this area will influence the rapid spread of fire.
2. Study the effect fire has on the vegetation a few years after such a burn. Also, the effect fire has on wildlife in the area.

RURAL COMMUNITY FIRE PROTECTION

The Federal Rural Community Fire Protection Act provides additional funding to fire department with the responsibility of protecting communities with a population of 10,000 or under. It is specifically designed to provide some additional financial assistance to these departments to increase their level of fire protection to the community. Prior to 1980-1981, this funding was traditionally utilized toward the maintenance and/or purchase of equipment or apparatus. However, since 1981 the emphasis has been directed toward training through an agreement with the Massachusetts Fire Academy.

The Massachusetts Fire Academy provides fire training for the 198 communities in the Commonwealth with population under 10,000.

In FY 1989 the Fire Academy conducted 571 Programs for 126 Communities with 3497 Students successfully completing the courses of instruction.

In addition, the Fire Academy has worked with the Bureau to develop a slidetape training program dealing with wildfire suppression and hazardous waste which will be used inhouse and with municipal fire departments and divisional personnel.

The Federal (RFP&C) Rural Fire Prevention and Control Program (old CM-2) has changed the way funds are allocated to the states as a direct result of Congress's insistence that new approaches are needed for the distribution of federal funds.

Justification that a proposal is in the "national interest" or "assists the forest service in achieving their goal" is the yardstick used to gain approval of state proposals.

FEDERAL EXCESS PROPERTY

FEDERAL EXCESS PROPERTY PROGRAM

The Federal Government authorized the Department of Agriculture - United States Forest Service to enter into an agreement with the Commonwealth of Massachusetts and its designee, the Department of Environmental Management, Bureau of Fire Control, to administer the Excess Property "Pass Through" Program. This program has generated a tremendous amount of interest from the rural fire communities in the Commonwealth.

Since the inception of the program on November of 1980, 210 communities have entered into agreements with the Bureau of Fire Control to accept federal excess property under the terms set forth by the U.S. Forest Service, the General Services Administration, and the Massachusetts Bureau of Fire Control. This reflects an increase of 6 communities from fiscal 1988.

In fiscal 1989 excess property from the federal government was in heavy demand by the rural fire communities in every county. Due to revised priority procedures by the federal government, many types of military vehicles are hard to acquire. We have to compete with Rhode Island, New Hampshire, Vermont, and Maine. Our vehicle acquisition has dropped considerably from the previous year.

By acquisition through the "Pass Through" Program, many communities were able to fulfill the fire protection needs that the towns people demanded at no cost to the particular town.

Over 97 fire communities received many items of excess property this past fiscal year. Desks, Chairs, Filing cabinets, book cases, storage cabinets, tables-shelving, typewriters, vacuum cleaners, fire protective clothing, shop equipment, and small tools were items in demand by many small communities. The approximate dollar value of all excess property transferred to RFD's in fiscal 1988 totaled 192,945 dollars. Since the inception of the "Pass Through" Program in 1980, a dollar value of 2,312,556.00 in excess federal property was transferred to the rural fire communities of the Commonwealth.

FEDERAL EXCESS PROPERTY(cont)

This past fiscal year the Bureau screened and acquired 510,210.00 dollars worth of federal excess property that was transferred to rural fire communities and to the five regions under the Division of Forests and Parks.

The process of acquiring material starts with the Fire Chief of a town when he submits his letter requesting participation together with his prioritized list. Request for equipment must be accompanied with a justification sheet which indicates the need for and how it will benefit his community and how it will be used and garaged. We then send the Chief a copy of our agreement which he signs and returns for the signatures of the Director and the Commissioner.

When the desired item is available and the Chief agrees to accept it, an addendum is filled out with the pertinent information on the item and signed by the Chief. Copies of the agreement, addenda and receiving GSA copy are sent to the Chief, District Fire Warden and Excess Property Coordinator with the original remaining in the Boston office.

The in-house machinery to administer the program includes five Regional Excess Property Coordinator who have the responsibility of maintaining the flow of records from the field to Boston.

The District Fire Wardens have direct contact with their Fire Chiefs as he in turn will start the process from the town to the Regional Coordinator.

The Bureau has administered the Excess Property Program since the 1960's when the U.S. Forest Service enabled the states to use their high federal priority to acquire property that would improve their fire protection capabilities.

The present dollar value of our Excess Property Inventory is \$3,437,270.00 an increase of \$510,210.00 from fiscal '88.

FEDERAL EXCESS PROPERTY(cont.)Federal Excess Property Loaned to Regions With \$500.00 Value or MoreREGION I

<u>Area</u>	<u>Property</u>	<u>Value</u>
Shawme Crowell S.P.	1987 Truck Cargo	\$ 4,169.00
	1979 One Ton Dodge Truck	\$20,000.00
	1975 Dodge Pick-up	\$ 7,945.00
Myles Standish S.P.	Scoop Loader	<u>\$19,450.00</u>
		\$51,564.00

REGION II

<u>Area</u>	<u>Property</u>	<u>Value</u>
Bradley-Palmer Fire	1975 ½ Ton Dodge Cargo Pick-up	\$ 4,169.00
	1970 Dodge Maint. Truck	\$ 4,320.00
Hopkinton S.P.	1968 Int. Harv. Fire Fighting Truck	\$15,356.00
Carlisle Hdqtrs.	1976 Dodge Stake Truck	<u>\$ 5,284.00</u>
		\$29,129.00

REGION III

<u>Area</u>	<u>Property</u>	<u>Value</u>
Otter River S.P.	1987 Chevrolet Cavalier	\$ 7,103.00
	(3) Royal Typewriters	\$ 2,425.00
	Trailer Cargo ½ Ton	\$ 2,642.00
Dam Safety L.F.O.	IBM Typewriter	<u>\$ 500.00</u>
		\$12,670.00

REGION IV

<u>Area</u>	<u>Property</u>	<u>Value</u>
Windsor Dam MDC	1969 AMC Jeep Carryall	\$ 3,754.00
Amherst Region	1972 Int. Harv. Dump Truck	\$ 5,084.00

FEDERAL EXCESS PROPERTY (CONT.)REGION IV (CONT.)

<u>Area</u>	<u>Property</u>	<u>Value</u>
Erving S.P.	Timplex M24 Microplexer	\$ 4,535.00
	JVC Video Player	\$ 1,160.00
	1976 Dump 2½ Ton	\$ 8,366.00
	VCR Panasonic Video U-Vision	\$ 1,160.00
	Panasonic Video Remote	\$ 1,300.00
	Panasonic Video Remote	\$ 1,300.00
Moore House Fire	1974 AMC Jeep	\$ 3,250.00
	1978 Ford Fairmont	\$ 3,066.00
	Snow Removal Unit	<u>\$ 588.00</u>
		\$33,563.00

REGION V

<u>Area</u>	<u>Property</u>	<u>Value</u>
Pittsfield S.P.	Cleaner-Steam Pressure Jet	\$ 1,971.00
	1979 Dodge Cargo Truck	\$ 7,945.00
	Tow Bar	\$ 657.00
	(3) Storage Cabinets	\$ 1,732.00
	IBM Typewriter	<u>\$ 610.00</u>
		\$12,915.00

FEDERAL EXCESS PROPERTY (cont)

Federal Installations Where Excess Property Was Acquired

<u>LOCATION</u>	<u>PROPERTY VALUE ACQUIRED</u>
Watervliet Arsenal Watervliet, N.Y.	\$81,287.00
Westover Air Base Westover, Ma	\$91,639.00
Fort Devens Fort Devens, Ma	\$62,595.00
GSA Randolph Warehouse Randolph, Ma	\$47,097.00
Otis AFB Sandwich, Ma	\$20,000.00
Groton Sub Base Groton, Ct.	\$1,275.00
Portsmouth Naval Shipyard Portsmouth, N.H.	\$19,399.00
Brunswick Naval Air Station Brunswick, ME	\$82,587.00
U.S. Forest Service Bartlett, N.H.	\$87,828.00
Bureau of Reclamation Salt Lake City, Utah	\$4,822.00
U.S. Revenue Dept. Methuen, Ma	\$2,481.00
Newington VA Hospital Newington, Ct.	\$6,500.00
Richmond, Va. GSA Richmond, Va.	\$2,700.00
	<hr/> <hr/>
TOTAL	\$510,210.00

FEDERAL EXCESS PROPERTY (CONT.)Rural Fire Communities Who Received Excess Property Vehicles And Generators:

<u>Area</u>	<u>County</u>	<u>Property</u>	<u>Cost</u>
Barre RFD	N. Worcester	1969 Dodge Truck Maint.	\$ 5,824.00
Essex County RFD	Essex	1968 Fire Fighting Pumper (Int. Harv.)	\$15,202.00
Templeton RFD	N. Worcester	1978 Dodge Truck Cargo	\$ 7,945.00
Royalston RFD	N. Worcester	1977 Int. Harv. Bucket Truck	\$17,000.00
Ware	Hampshire	1975 Dodge Truck Cargo	\$ 7,945.00
Russell	Hampden	1972 Bucket Truck	\$34,853.00
Webster RFD	S. Worcester	(2) IBM Typewriters	\$ 1,000.00
Monson	Hampden	100 KW Generator	\$10,000.00
Pittsfield RFD	Berkshire	Bin Storage Cabinet	\$ 574.00
Adams RFD	Berkshire	Bin Storage Cabinet	\$ 574.00
			<u>\$100,917.00</u>

FEDERAL EXCESS PROPERTY "PASS THROUGH PROGRAM" STATISTICS

<u>RURAL FIRE DEPARTMENTS ENROLLED</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<u>IN PASS THROUGH PROGRAM:</u>	90	127	148	161	183	191	204	210

<u>VALUE OF EXCESS PROPERTY ACQUIRED</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<u>FOR RFD'S AND DEPARTMENTAL USE:</u>	\$329,264	\$456,822	\$572,854	\$477,184	\$555,680	\$896,614	\$560,157	\$510,210

<u>TOTAL VALUE OF PROPERTY ACQUIRED THROUGH THIS PROGRAM</u>	<u>\$3,437,270.00</u>
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PRESUPPRESSION-CONSTRUCTION-MAINTENANCE

PRESUPPRESSION - CONSTRUCTION - MAINTENANCE

Each Year our construction crew headquarters in Brimfield performs many tasks in restructuring fire towers, cabins, telephone and power lines. This year was not exception. Fourteen fire towers had work performed on them. The crew's expertise in all phases of construction activity is invaluable

The following schedule indicates work performed in the various counties where our towers are located.

<u>TOWER</u>	<u>COUNTY</u>	<u>WORK PERFORMED</u>
Fall River Tower	Bristol County	Microwave station installed
Bourne Bridge Antenna	Barnstable County	Installed new duplexer
Falmouth Tower	Barnstable County	Steel repair and replacement
Dennis Tower	Barnstable County	Roof repair on cabin
Carver Tower	Plymouth County	Installed new antenna
Sudbury Tower	S Middlesex County	Installed new antenna, repaired fences
Groton Tower	N Middlesex County	Repaired electrical service
Princeton Tower	N Worcester County	Installed Antenna, annual tower inspection
Wachusett Mtn	N Worcester County	Removed damaged antennas
Charlton Tower	S Worcester County	Guy wires repaired
West Brookfield Tower	S worcester County	Installed electricity to tower
Pelham Tower	Hampshire County	Installed microwave station
Ludlow Tower	Hamden County	Power Line work and repair
Savoy Tower	Berkshire County	Power line and guy wire repair
Lenox Tower	Berkshire County	Repaired Tower Cabin

FOREST AND PARK MAINTENANCE

The fire construction crew spent many manhours on many other Division facilities. Without their expertise in all areas of construction and rehabilitation work, the cost to accomplish this work would be beyond budgetary limits.

REGION I

<u>LOCATION</u>	<u>COUNTY</u>	<u>WORK PERFORMED</u>
Nickerson State Park	Barnstable County	New power line and power line repairs
Marthas Vineyard S.F.	Dukes County	Repaired power line
Myles Standish Hdqrs.	Plymouth County	Installed new cable and adjusted antenna

REGION II

<u>LOCATION</u>	<u>COUNTY</u>	<u>WORK PERFORMED</u>
Maudslay State Park	Essex County	Repaired Circuits

REGION III

<u>LOCATION</u>	<u>COUNTY</u>	<u>WORK PERFORMED</u>
Otter River S.P.	N Worcester County	Installed poles
Douglas S.P.	S Worcester County	Power line repair
Clinton Hdqrs	N Worcester County	Painted and repaired antenna tower base

REGION IV

<u>LOCATION</u>	<u>COUNTY</u>	<u>WORK PERFORMED</u>
Sugarloaf Mountain	Franklin County	New power line
Goshen S.P.	Hampshire County	New power line power line and telephone line repairs; guywire repairs
Chesters S.F.	Hampden County	New power line power line and telephone line repairs; guywire repairs

FOREST AND PARK MAINTENANCE (cont)

Reg IV

<u>LOCATION</u>	<u>COUNTY</u>	<u>WORK PERFORMED</u>
Hampton Ponds S.P.	Hampden County	Installed new wiring for telephone system
Chicopee S.P.	Hampden County	Location of underground telephone cables
Brimfield S.F.	Hampden County	Built bridge across brook installed new furnace repaired maintenance bldgs. remodled office fabricated cabin windows
Mohawk S.F.	Franklin County	Repaired power lines
Robinson S.P.	Hampden County	New pole installation
Granville S.F.	Hampden County	Repaired tractor
Chicopee S.P.	Hampden County	Repaired Tractor
Amherst Hdqtrs.	Hampshire County	Repaired and painted antenna tower base

REGION V

<u>LOCATION</u>	<u>COUNTY</u>	<u>WORK PERFORMED</u>
Tolland S.F.	Berkshire County	Power line repairs and guy wire repairs
Mt. Greylock	Berkshire County	Antenna installed for repeater
Mt. Wilcox	Berkshire County	Installed pole and repaired power lines

During the past fiscal year the construction crew performed 6,132 man hours to fire related projects and 2,338 man hours to recreation related projects

John Motroni, foreman, Gary Faulkins, Dick Riberdy, and Bill Cloran travel extensively throughout the state to perform many radio, telephone, and electric related activities for the Department.

PRESUPPRESSION

ASSISTANCE TO OTHER BUREAUS:

The Bureau of Fire Control fire personnel assisted other Department Bureaus in many phases of park related activities. According to Bureau statistics, 20,298 manhours were performed assisting other Bureaus in the Division of Forests and Parks. On a monthly average 1,692 manhours is spent on work projects other than Bureau's work assignment. Cooperation within the Division by the Bureau of Fire Control has to add to the Bureau's wide expertise in all kinds of work projects it is asked to perform.

ROAD AND FIRE LANE MAINTENANCE

Each year our fire personnel are required to maintain roads and fire lanes in all our state owned lands. Fire ponds are also maintained as a source of water supply during suppression activities. This past fiscal year we maintained 174 miles of fire access roads.

PRESUPPRESSION

JULY 1, 1988 - JUNE 30, 1989

BRIMFIELD FIRE CONSTRUCTION CREW ACTIVITY REPORT

	MAN HOURS	CUM TOTAL
1. TOWER MAINTENANCE		
A. FIRE TOWER MAINTENANCE		986
B. RADIO TOWER MAINTENANCE		70
2. BUILDING MAINTENANCE		
A. FIRE RELATED		1,208
B. RECREATION RELATED		458
3. POWER LINE MAINTENANCE		
A. FIRE RELATED		235
B. RECREATION RELATED		464
4. TELEPHONE LINE MAINTENANCE		
A. FIRE RELATED		60
B. RECREATION RELATED		112
5. ELECTRICAL-WIRING & SERVICE		
A. FIRE RELATED		36
B. RECREATION RELATED		122
6. WELDING		
A. FIRE RELATED		44
B. RECREATION RELATED		196
7. SPECIAL PROJECTS		
A. FIRE RELATED		80
B. RECREATION RELATED		298
8. TRAINING PROGRAMS		
A. IN-HOUSE		
B. OTHER		
9. FIRE SUPPRESSION		
10. ANTENNA AND RADIO SYSTEM		
A. FIRE RELATED		154
B. STATEWIDE RADIO SYSTEM		288
11. ADMINISTRATIVE (PAYROLL, PAPERWORK, SPECS, ETC.)		
		1,003
12. OTHER		
		670
13. ACCRUED MAN HOURS:		
A. VACATION HOURS		524
B. SICK LEAVE HOURS		222
C. PERSONAL HOURS		88
D. HOLIDAY HOURS		436
E. OTHER LEAVE		214

CUM. FIRE HOURS: 6132 //CUM. RECREATION HOURS: 2338

MASSACHUSETTS FIRE COUNCIL

MASSACHUSETTS FOREST FIRE COUNCIL

The Massachusetts Forest Fire Council has proven to be a very important organization to the Bureau of Fire Control. The Council has representation from every forest fire association in the Commonwealth. The Council meets quarterly to discuss important forest fire techniques and procedures.

A progress report is presented to the Council by the Chief Fire Warden during these sessions. By statute the Bureau has the responsibility to assist all fire communities in all related detection, prevention, pre-suppression and suppression activities.

The following organizations have delegates who attend these quarterly meetings:

Barnstable County Fire Chiefs Association
Cape Cod Foresters and Firefighters Association
Plymouth County Forest Wardens and Firefighters Association
Bristol County Forest Wardens and Firefighters Association
Norfolk County Firefighters and Wardens Association
Essex County Fire Wardens Association
Blackstone Valley Forestry Association
Quabog Mutual Aid Association
Worcester West Forest Wardens Association
Western Mass. Forest Wardens Association
Berkshire County Forest Wardens Association

Members also include the Director of Forests and Parks, Regional Forests and Parks Supervisors, District Fire Wardens and Patrolmen, Rural Fire Department Fire Chiefs, Forest Wardens and the Director of Air Quality Control, DEQE.

NORTHEASTERN FOREST FIRE PROTECTION COMMISSION
(COMPACT)

NORTHEASTERN FOREST FIRE PROTECTION COMMISSION (COMPACT)

The Northeastern Interstate Forest Fire Protection Compact Public Law #129-81st Congress was passed to promote effective prevention and control of forest fires in the northeast region of the United States and adjacent areas of Canada by maintenance of adequate forest fire fighting services by member states and by providing for mutual aid in fighting forest fires. This law was approved by Congress in 1949. It was designated as "Northeastern Forest Fire Protection Commission" (COMPACT).

The COMPACT is comprised of three Commissioners from each state and the province of Quebec and New Brunswick who appointed an Executive Director who will perform all the duties customarily performed by a secretary and a treasurer. There are four standing committee designated: Operations Committee (Fire Supervisors), Training Committee, Equipment Committee, and Prevention Committee. Each standing committee shall have one representative from each compact member state.

Committees shall meet not less than once per year and shall present a report of its activities to the annual meeting of the Commissioners held every July. The COMPACT is comprised of fire personnel from Massachusetts, Connecticut, Rhode Island, New York, Vermont, New Hampshire, Maine and the Province of Quebec and New Brunswick from neighboring Canada.

Each year COMPACT holds a training seminar to instruct COMPACT crews in the latest advances in forest fire control and how to react to inter and intra state emergencies.

COMPACT WINTER TRAINING

This year COMPACT winter training seminar was held in Rutland, Vt. on February 7th through the 9th 1989. This years training theme stressed "Wildland Urban Interface Fire Protection". Paul Gilmore from New Brunswick was Day Chairman opening day. Each state spoke on Wildland Urban Interface and what procedures they are using to implement this program. Fire Chief Hawkins from Fredericton N.B. and Fire Chief Munroe from Pembroke, N.H. gave talks on what the Urban towns are

doing to develop this interface problem. John Bethea (ret.) forester from the State of Florida spoke on the problems Florida was facing implementing this type of program. Ron Dimerjian from the Insurance Service Organizations gave a talk on the insurance industries role. Clark Davis of N.H. and Joe Sakaske from Ma. also shared the Day Chairman status.

OPERATIONS COMMITTEE

Massachusetts is represented on this committee by Chief Fire Warden Antonio Castro. This Committee is made up of Fire Supervisors from every State in the Compact which also includes the provinces of Quebec and New Brunswick in Canada. This Committee is responsible in formulating a five year training program, standardizing equipment and setting up forest fire Prevention programs. Recommendations are made to the Compact Commissioners for their approval.

TRAINING COMMITTEE

Massachusetts is represented on this committee by District Fire Warden Joe Sakaske. This committee is responsible for formulating all training procedures which will be adopted by the Compact States. Recommendations are made to the Operations Committee for their approval.

EQUIPMENT COMMITTEE

Massachusetts is represented on this Committee by District Fire Warden Philip MOulton. The equipment Committee is responsible in setting standards on all fire fighting equipment which will be used by the Compact States. Recommendations are then made to the Operations Committee for their approval or disapproval.

PREVENTION COMMITTEE

Massachusetts is represented on this committee by William Care, District #9 Fire Warden. This committee is responsible in formulating forest fire prevention programs for the COMPACT and makes its recommendations to the Operations Committee.

STATE SAFETY COMMITTEE

STATE SAFETY COMMITTEE

In 1983 the Chief Fire Warden was designated chairman of the State Safety Committee by the Director of Forests & Parks. This committee is comprised of Bureau Chiefs in the Division of Forests & Parks.

A District Fire Warden was designated as chairman in each of the 5 regions in the Division. The Safety Committee objective was to formulate safety policy and safety programs for all division personnel and millions of the public patrons who visit our network of state parks. It is the responsibility of the Regional Safety Chairman to inspect all worksite areas, buildings, vehicles and all types of power equipment to see if they meet all the safety standards prescribed by OSHA.

Weekly reports are received by the Regional Chairman from Area Supervisors who monitor safety standards in their respective areas. If a safety hazard or a safety problem is reported, it is the responsibility of the Region Chairman and his Regional Safety Committee to take whatever corrective action is necessary to correct the deficiency. If the safety deficiency can not be corrected in-house, the deficiency reports are forwarded to the State Safety Chairman in Boston to take what ever corrective actions are necessary. The Director of Forests and Parks will make the final decision.

State-wide safety meetings are held at least twice a year with all safety designated committees. The Regional Safety Chairmen and his committee meet once a month at different unit areas to perform safety inspections in the area. Each fiscal year monies received through the Dept. of Envir. Mgt. Retained Revenue Fund is passed on to the Regions.

In fiscal 1989 each Region was allocated \$2,400.00 to be used to purchase safety equipment needs which will make the work place safer for agency personnel and the visiting public.

The success of our safety program depends on the importance of stressing safety first at all times. The hard work of the Regional Safety Committees in educating all of the Division personnel in good driving habits, proper instruction in the use of power equipment and tools and diligent safety habits has made this program the best in the Commonwealth.

STATISTICS-ACTIVITIES

CONFIDENTIAL

CONFIDENTIAL

FIRE CONTROL ACTIVITY STATISTICS

<u>Activity</u>	<u>FISCAL YEARS</u>					
	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Miles Patrolled	460,463	616,570	498,323	435,029	542,479	568,117
Logging Inspections	1,876	2,793	3,381	2,622	3,032	2,498
Fires Detected:	1,624	4,773	4,401	2,049	3,919	3,623
(Towers)	1,619	3,662	3,160	863	1,798	1,642
(Aerial)	5	9	6	23	67	60
(Other)	0	1,102	1,235	1,163	2,054	1,921
Prevention Programs	591	617	632	763	590	578
Acres Burned	5,168	13,777	9,110	3,418	8,164	9,099
Fires Reported	5,302	7,755	6,162	2,912	5,721	3,732
Truck Runs	350	751	416	271	804	544
Forest Fire Violations	211	247	412	83	364	133
Chapter 132 Violations	364	253	183	102	130	84
Chapter 132 Cutting Plans	1,094	1,123	816	591	664	577
Assists to Cities & Towns	975	1,430	1,680	387	581	410
Miles of Access Roads (services)	270	232	336	205	256	170
Training Program:	635	1,008	771	527	362	340
(in-house)	425	672	493	424	256	200
(other)	210	336	276	103	106	140
Assistance to Other Bureau (Man-Hours)					16,294	20,290

FISCAL 1989

District	Prevention Prgms.		Training		Chapt #132 Inspections	Violations		Presuppression Access Rds Servic
	School	Other	In-House	Other		Fire	Other	
1	9	25	4	1	0	0	0	3
2	17	17	16	10	60	6	9	18
3	13	8	8	5	21	0	2	41.5
4	8	34	8	4	60	58	5	12.0
5	16	24	7	0	66	1	0	34
6	14	26	19	17	164	2	1	6
7	17	32	0	12	263	5	11	1.55
8	28	14	7	7	181	10	0	10 1/2
9	9	10	41	21	456	18	19	5
10	19	8	23	23	294	13	24	0
11	57	96	38	19	334	1	9	7
12	12	12	18	4	526	14	4	36.25
14	35	18	11	17	73	7	0	.25

FISCAL 1988

District	Prevention Prgms School / Other		Training In-House / Other		Chapt #132 Inspections	Violations Fire / Other		Presuppre Access Rds
1	15	5	0	1	5	8	0	0
2	54	5	22	9	69	16	41	22 ½
3	12	9	21	1	28	1	1	16
4	50		11	2	67	64	0	3.75
5	3	9	8	4	8	2	2	25
6	38	1	30	9	171	13	0	0
7	14	54	5	8	497	22	12	1.0
8	47	0	2	4	186	7	26	104 ½
9	4	6	16	39	922	20	52	20
10	6	4	48	2	448	2	0	10
11	3	9	33	14	56	9	0	8.35
12	7	2	25	1	471	193	0	10
14	46	5	29	14	81	0	0	7
					111			

FISCAL 1987

District	Prevention Prgms.		Training		Chapt #132 Inspections	Violations		Presuppression Access Rds Service
	School	Other	In-House	Other		Fire	Other	
1	42		6	3	0	0	0	5
2	85		42	46	118	13	0	25 ½
3	39		19	2	78	2	3	65.30
4	65		47	2	53	12	0	8.0
5	39		19	0	15	4	1	33
6	23		10	8	110	8	8	0
7	60		19	1	461	19	12	1.35
8	58		8	4	176	1	6	9
9	19		73	0	296	3	17	19.9
10	75		126	0	708	38	42	15.65
11	60		33	16	98	16	13	3
12	15		8	11	383	2	0	9
14	183		14	10	126	1	0	10 ½
					112			

FISCAL 1986

District	Prevention Prgms. School / Other	Training In-House / Other	Chapt #132 Inspections	Violations Fire / Other	Presuppre Access Rds
1	34	12 1	0	0 0	13
2	89	68 34	264	15 15	9
3	54	21 0	162	0 26	45
4	44	48 1	72	1 0	23.5
5	48	12 0	48	8 0	49
6	27	22 6	143	2 21	6
7	46	25 24	540	0 14	1.10
8	52	4 2	198	2 6	17
9	9	49 20	258	0 2	5
10	44	120 27	643	47 85	17.7
11	63	44 33	144	5 13	4.25
12	34	53 19	533	0 0	21.4
14	20	17 9	129	3 1	15.0
			113		

FISCAL 1985

District	Prevention Prgms.		Training		Chapt #132 Inspections	Violations		Presuppression Access Rds Service
	School	/ Other	In-House	/ Other		Fire	/ Other	
1	57		55	73	2	1	0	6
2	62		65	79	172	52	5	0
3	54		30	6	174	6	4	42
4	39		40	0	84	0	0	20.5
5	51		12	0	80	11	0	35
6	152		23	24	152	0	0	1
7	43		44	14	363	0	4	2.0
8	57		12	6	189	3	4	5 ½
9	7		57	10	173	0	0	0
10	76		115	16	399	14	198	42.50
11	67		91	57	188	4	0	10 ½
12	1		73	47	599	3	0	14.95
14	73		55	4	218	39	0	3.5
					114			

1985 THRU 1989 5 YEARS AVERAGE

District	Prevention Prgms. School & Other	Training In-House / Other	Chapt #132 Inspections	Violations Fire / Other	Presuppr Access Rds
1	187	77 79	7	9 0	27
2	330	213 178	683	102 70	75
3	189	99 14	463	9 36	210
4	240	154 9	336	135 5	67
5	190	58 4	217	26 3	176
6	281	104 64	740	25 30	13
7	266	93 59	2,124	46 53	7
8	256	33 23	930	23 42	146
9	64	236 90	2,105	41 90	50
10	232	432 68	2,492	114 349	86
11	355	239 139	820	35 35	33
12	83	177 82	2,512	212 4	92
14	380	126 54	627	50 1	36

Acreage by Causes
June 1988 - may 1989

Camper	Smoker	Debris	Incen- diary	Light- ning	Misc.	Child- ren	R.R.	Equip. use	Total
226.3	433.3	1025.8	2904.45	86.3	750.55	247.7	707.8	345.25	9097.45

Acreeage by Districts

June 1988 - May 1989

District	A	B	C	D	E	Total
1	81.25	142.75	90	170	-	48
2	87.1	134.75	20	-	-	241
3	58	6.75	446	-	-	117
4	417.5	524.25	67	250	-	1,25
5	75.25	105.75	297	-	-	47
6	54.85	337.75	121	-	-	51
7	45.75	326.75	407	300	-	1,07
8	80.35	225.75	60	-	-	360
9	43	107	50	-	-	20
10	35.65	262.95	133.5	250	-	68
11	61.85	351.25	749	500	-	1,60
12	7.5	110.2	31.5	-	-	43
14	62.5	343.25	114	-	-	51
Total	1,110.55	3,647.4	2,869.5	1,470	-	9,07

Fires (Size by District)

June 1988 - May 1989

District	A	B	C	D	E	Total
1	332	82	3	1	—	418
2	452	92	2	—	—	546
3	232	444	23	—	—	699
4	1,671	346	4	2	—	2,023
5	301	70	9	—	—	380
6	240	233	6	—	—	479
7	185	193	19	2	—	399
8	470	178	2	—	—	650
9	172	58	4	—	—	234
10	179	221	6	2	—	408
11	317	236	33	2	—	588
12	30	185	12	—	—	227
14	250	261	7	—	—	518
Total	4,831	2,599	130	9	—	7,569

Summary by Districts

June 1988 - May 1989

District	No. Fires	Acres	Cost
1	418	484	\$ 111,163.00
2	546	241.85	22,418.55
3	699	1,179	73,702.00
4	2,023	1,258.75	54,916.00
5	380	478	9,876.00
6	479	513.6	27,992.00
7	399	1,079.5	61,247.00
8	650	366.1	162,382.10
9	234	200	31,851.00
10	408	682.1	42,429.70
11	588	1,662.1	66,822.00
12	227	432.7	52,526.40
14	518	519.75	31,050.00
Total	7,569	9,097.45	\$ 750,375.80

Damage - \$233,347.70

Acres Burned (Type of Area)

June 1988 - May 1989

District	Comm. Forest	Non - Comm. Forest	Nonforested Watershed	Non - Forest	Total
1	.75	483.25	-	-	484
2	-	241.85	-	-	241.85
3	-	892.75	151.75	134.5	1179
4	963.75	295	-	-	1258.75
5	263.25	138.5	3.5	72.75	478
6	2.5	497.4	-	13.7	513.6
7	601.25	266.75	-	211.5	1079.5
8	77.25	141.25	14.25	133.35	366.1
9	-	200	-	-	200
10	368.4	160.85	2.75	150.1	682.1
11	-	142.1	-	1,520	1,662.1
12	283.95	121.75	2.5	24.5	432.7
14	-	376.5	57.5	85.75	519.75
Total	2,561.1	3,257.75	23.2	2,846.15	9,097.45

No. of Fires (Type of Area)

June 1988 - May 1989

Com. Forest	Non - Comm. Forest	Non - Forest	Nonforested Watershed	Total
1,863	3,730	743	1,233	7,569

Summary by Month

June 1988 - May 1989

Month	No. Fires	Acres	Cost
June	974	12 09.55	\$ 114,193.45
July	1,264	771.3	80,869.55
August	351	196.55	38,671.70
September	286	147.25	39,384.50
October	393	237.85	34,292.50
November	179	149.7	11,016.45
December	86	66.75	8,534.50
January	482	258.15	28,636.00
February	195	120.55	11,990.50
March	611	1,041.3	80,960.00
April	2,049	4,651.2	275,079.42
May	699	247.3	26,747.25
✓ Total	7,569	9,097.45	\$ 750,375.82

Summary by Causes

June 1988 - May 1989

Dist.	Light	Camper	Smoker	Debris	Incen-Diary	Equip. Use	R.R.	Child-ren	Misc.	Total
1	-	20	45	58	145	57	1	72	20	418
2	1	8	59	30	180	11	7	113	137	546
3	-	12	15	66	294	8	-	97	207	699
4	7	93	216	172	269	24	46	852	344	2,021
5	-	10	69	90	64	-	1	107	39	380
6	2	3	25	44	25	6	14	200	160	477
7	-	5	11	60	194	2	3	104	20	399
8	5	29	81	142	90	13	46	183	61	650
9	1	7	24	126	29	12	17	18	-	233
10	38	66	97	60	52	7	18	64	6	408
11	4	17	34	159	74	3	19	257	21	588
12	2	-	1	96	125	2	-	-	1	323
14	-	26	47	33	47	15	4	310	36	518
Total	60	296	724	1,136	1,588	160	176	2,377	1,052	7,569

A P P E N D I X

FACILITY ATTENDANCE

FORESTS & PARKS
HERITAGE PARKS
RINKS
POOLS
BEACHES
TOTAL ATTENDANCE ALL FACILITIES

DIVISION OF FORESTS & PARKS REVENUE

SUMMARY OF REVENUE
PARKS
RINKS
POOLS
BEACHES

DIVISION OF PLANNING & DEVELOPMENT

SUMMARY OF LAND ACQUISITION

1989 FISCAL YEAR
ATTENDANCE RECORD

AREA	CAMPING	DAY USE	NON-PAID	PAID	TOTAL
AMES NOWELL	-	29,352	20,536	8,816	29,352
ASHLAND	-	57,486	50,847	6,639	57,486
BEARTOWN	4,731	35,995	31,510	4,485	40,726
BLACKSTONE	-	27,310	27,310	-	27,310
BORDERLAND	-	91,502	91,502	-	91,502
BRADLEY PALMER	-	68,330	68,330	-	68,330
BUFFUMVILLE	-	19,925	19,925	-	19,925
CALLAHAN, RAYMOND J.	-	21,462	21,462	-	21,462
CAMPBELL FALLS	-	2,939	2,939	-	2,939
CAPE COD RAIL TRAIL	-	108,887	108,887	-	108,887
CHESTER-BLANDFORD	266	9,720	9,720	-	9,986
CHICOPEE	3,198	63,974	24,253	39,721	67,172
CLARKSBURG	2,840	5,700	1,079	4,621	8,540
COCHITUATE	-	140,905	50,789	90,116	140,905
COOKSON	-	2,509	2,509	-	2,509
D.A.R.	20,228	58,881	29,709	29,172	79,109
DEAN POND BRIMFIELD	1,286	24,718	11,585	13,133	26,004
DEMAREST LLOYD	-	36,313	7,309	29,004	36,313
DENNISON LAKE	43,902	85,145	68,068	17,077	129,047
DIGHTON ROCK	-	9,872	6,401	3,471	9,872
DOUGLAS	-	94,379	42,904	51,475	94,379
DUBUQUE	-	17,915	17,915	-	17,915
ERVING	4,619	70,683	52,411	18,272	75,302
FED. WOMEN'S CLUB	2,646	18,903	18,903	-	21,549
F.G. HILLS	-	6,689	6,689	-	6,689
FREETOWN	-	13,887	10,760	3,127	13,887
GARDNER	-	12,146	4,374	7,772	12,146
GRANVILLE	14,585	14,356	5,418	8,938	28,941
GREAT BROOK FARM	-	30,240	30,240	-	30,240
HALIBUT POINT	-	84,584	81,822	2,762	84,584

AREA	CAMPING	DAY-USE	NON-PAID	PAID	TOTAL
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HAMPTON PONDS	-	49,404	21,489	27,915	49,404
HAROLD PARKER	28,619	49,890	38,397	11,493	78,509
HOLLAND POND	563	28,602	21,025	7,577	29,165
HOLYOKE NOTCH	-	46,295	46,295	-	46,295
HOPKINTON	-	214,809	139,730	75,079	214,809
LAKE LORRAINE	-	3,074	-	3,074	3,074
LEOMINSTER	-	55,671	29,745	25,926	55,671
LOWELL-DRACUT	-	100,001	100,001	-	100,001
MARTHA'S VINEYARD	-	34,017	34,017	-	34,017
MASSASOIT	43,489	40,900	30,153	10,747	84,389
MAUDSLEY	-	128,118	128,118	-	128,118
MOHAWK TRAIL	12,778	20,959	17,450	3,509	33,737
MOORE	-	16,024	16,024	-	16,024
MT. EVERETT	-	31,109	31,109	-	31,109
MT. GRACE	-	14,724	13,848	876	14,724
MT. GREYLOCK	4,780	121,381	121,078	303	126,161
MT. SUGARLOAF	-	114,014	114,014	-	114,014
MT. WASHINGTON	464	72,882	72,882	-	73,346
MYLES STANDISH	109,103	436,690	395,996	40,694	545,793
NATURAL BRIDGE	-	10,808	1,767	9,041	10,808
NICKERSON	117,842	98,568	79,966	18,602	216,410
OCTOBER MT.	7,469	42,718	41,875	843	50,187
OTTER RIVER	14,211	60,038	55,802	4,236	74,249
PEARL HILL	4,970	24,059	13,502	10,557	29,029
PITTSFIELD	4,023	19,972	15,163	4,809	23,995
PLUM ISLAND	-	61,643	61,643	-	61,643
PURGATORY CHASM	-	86,105	86,105	-	86,105
QUINSIGAMOND-REGATTA	-	260,567	253,739	6,828	260,567
QUINSIGAMOND-LAKE PARK	-	182,277	177,260	5,017	182,277
ROBINSON	-	23,674	11,540	12,134	23,674
RUTLAND	-	44,385	20,165	24,220	44,385
SANDISFIELD-YORK	-	14,214	4,067	10,147	14,214

AREA	CAMPING	DAY-USE	NON-PAID	PAID	TOTAL
SAVOY	9,289	11,421	9,494	1,927	20,710
SHAWME-CROWELL	54,058	8,009	8,009	-	62,067
SKINNER	-	109,335	109,335	-	109,335
SPENCER	-	27,458	19,957	7,501	27,458
STANDISH MONUMENT	-	36,427	36,427	-	36,427
STREETER	39,435	66,336	33,734	32,602	105,771
TOLLAND	29,057	52,341	40,337	12,004	81,398
TULLY RECREATION AREA	3,044	19,847	19,847	-	22,891
UPTON	-	16,285	16,285	-	16,285
WACHUSETT MOUNTAIN	-	228,877	228,877	-	228,877
* - SKI AREA	-	355,450	-	355,450	355,450
WAHCONAH FALLS	-	11,189	11,189	-	11,189
WALDEN POND	-	458,498	338,087	120,411	458,498
WATSON	-	34,651	21,022	13,629	34,651
WELLS	25,117	32,119	30,826	1,293	57,236
WENDELL	-	19,540	8,570	10,970	19,540
WEST LAKE	169	4,269	4,269	-	4,438
WHITEHALL	-	67,371	67,371	-	67,371
WILLARD BROOK	6,351	61,211	26,375	34,836	67,562
WILLOWDALE	-	32,480	32,480	-	32,480
WINDSOR	2,317	9,134	4,276	4,858	11,451
WOMPATUCK	18,384	99,289	99,212	77	117,673
TOTAL	633,833	5,533,836	4,286,050	1,247,786	6,167,669

*Privately operated

HERITAGE PARKS	NON-PAID	TOTAL
Fall River	169,989	169,989
Gardner	85,833	85,833
Holyoke	143,452	143,452
Lawrence	53,535	53,535
Lowell	374,192	374,192
Lynn	47,071	47,071
North Adams	61,322	61,322
TOTAL	935,394	935,394

SKATING RINKS	DAY-USE	TOTAL
AUBURN		198,290
BROCKTON		118,050
FALL RIVER		136,537
FRANKLIN		161,748
GARDNER VETERANS		126,051
GREENFIELD		92,058
HAVERHILL		114,153
HOLYOKE		106,978
LOWELL		176,504
MARLBORO		176,537
NEW BEDFORD		174,645
NEWBURYPORT		168,826
NORTH ADAMS		45,332
PEABODY		85,302
PLYMOUTH		142,590
SPRINGFIELD		115,147
TAUNTON		87,799
WORCESTER		207,678
TOTAL		2,434,225

Revised November 30, 1989

SWIMMING POOLS	DAY-USE	TOTAL
AGAWAM		12,349
ATTLEBORO		16,297
BROCKTON		24,915
CHICOPEE		14,326
CLINTON		30,033
FALL RIVER		39,534
FITCHBURG		18,505
HOLYOKE		12,726
LAWRENCE (Higgins)		23,298
LAWRENCE (Giesler)		Not Open
LEOMINSTER		14,847
LOWELL		14,215
LUDLOW		15,290
MILFORD		26,796
SOUTHBRIDGE		15,517
SOUTH HADLEY		18,991
SPRINGFIELD		11,623
WESTFIELD		11,620
WORCESTER #1 (Shine)		20,033
WORCESTER #2 (Bennett)		15,998
TOTAL		356,913

Revised November 30, 1989

BEACH AREAS	CAMPING	DAY-USE	NON-PAID	PAID	TOTAL
FT. PHOENIX	-	57,261	41,971	15,290	57,261
HORSENECK	39,088	379,497	167,637	211,860	418,585
SALISBURY	176,216	2,147,594	1,954,415	193,179	2,323,810
SCUSSET	46,468	154,256	79,409	74,847	200,724
SOUTH CAPE	1,617	31,690	16,747	14,943	33,307
TOTAL	263,389	2,770,298	2,260,179	510,119	3,033,687

	CAMPING	DAY-USE	TOTAL
Total Attendance At All Facilities	897,222	8,304,134	9,201,356

TOTAL ATTENDANCE ALL FACILITIES

	<u>CAMPING</u>	<u>DAY USE</u>	<u>NON-PAID</u>	<u>PAID</u>	<u>TOTAL</u>
FORESTS & PARKS	633,833	5,533,836	4,286,050	1,247,786	6,167,669
OCEAN BEACHES	263,389	2,770,298	2,260,179	510,119	3,033,687
RINKS					2,434,225
POOLS					356,913
HERITAGE PARKS			935,394		935,394
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TOTALS	897,222	8,304,134	7,481,623	1,757,905	12,927,888

FY 1989 SUMMARY OF REVENUE

AREA	DAY USE	CAMPING	OTHER	TOTAL
BEACHES	664,278.00	712,526.00	84,154.00	1,460,958.00
FORESTS & PARKS	1,088,378.00	1,299,009.00	518,728.00	2,906,115.00
POOLS	91,436.00	-	5,894.00	97,330.00
RINKS	2,705,275.00	-	142,820.00	2,848,095.00
TOTAL	4,549,367.00	2,011,535.00	751,596.00	7,312,498.00

PARKS FY 1989

	PARKING	RECEIPTS	SEASON PASS	RUS	ADULT WALK-INS	HOUSE RENTS	CHILDRENS WALK-INS	COTTAGE PERMITS	CONCESSION	MISC.	PIER PERMITS	GROUP	PAY PHONE	TOTALS
AMES NOWELL	10,543.00		2,040	20								270		12,873.00
ASHLAND	5,200.00		1,430					600	301.01					6,931.01
ASHMERE LAKE														600.00
BEARTOWN	4,711.00	7,681	2,020			3,047			175.50					17,634.50
BORDERLAND						5,937				220.00				6,157.00
BOSTON HARBOR ISL.									1,540.00	10,288.07				11,828.07
BRADLEY PALMER	6,003.00		550			13,836						1,185		21,574.00
BUFFUMVILLE	3,246.00		1,060						65.00					4,371.00
CARLISLE(G.B.F.)		375				13,420				800.00				14,595.00
CHESTER GARDNER	6,042.00	466	460		22.25		6.50							6,996.75
CHICOPEE	33,268.00		8,120	180	43.25		7.95							41,619.20
CLARKSBURG	5,356.00	5,217	2,330				3.00							13,256.50
COCHITUA	95,797.20		25,700	480	1,032.00		60.00							134,587.08
D.A.R.	18,518.00	28,459	9,400	40			4.00							56,528.50
DEAN POND(BRIMFIELD)	7,189.00		3,420		21.25							372		12,002.75
DEMAREST LLOYD	28,287.00		6,830	100					247.03					35,464.03
DIGHTON ROCK	750.00		100				3.00							853.00
DOUGLAS	44,306.00		13,680	460										59,873.51
ERVING	15,890.00	9,632	10,480	80	69.50		31.00							36,182.50
FEDERATED WOMEN'S														0
FOXBORO														0
FREETOWN	2,775.00		950			3,120				25.00				6,870.00
GRANVILLE	3,890.00	6,787	660											11,337.00
HALIBUT POINT	7,140.00		930		30.00		1.00							8,101.00
HAMPTON POND	24,344.00		5,520	20	106.25	11,736	79.00		402.50					42,207.75
HAROLD PARKER	14,074.00	78,148	340	20					476.00				422.33	93,480.33
HOLLAND POND	5,037.00		520						51.00					5,608.00
HOPKINTON	81,354.00		25,690	120					9,405.00			1425		119,224.00
LAKE DENNISON	11,902.00	75,256	5,530						241.12					92,929.12
LAKE LORRAINE	2,400.00		1,080		54.00		84.00							3,618.00
LEOMINSTER	16,496.00		7,060	20	90.00	2,328	6.00		407.00					26,407.00
MARTHA'S VINEYARD						3,892			100.00					3,992.00
MASSASOIT	13,111.00	100,854	2,550	60						311.00			309.84	117,195.84
MAIDSLAY						7,992				30.00				8,022.00
MOHAWK	3,739.00	34,293	320						55.50					38,407.50
MOORE						4,092				1,600.00				5,692.00
MT. GRACE	570.00		200									75		845.00
MT. GREYLOCK	933.00	9,535	90											
									40,753.00	31,416.81				82,727.81

PARKS FY 1989

	PARKING	RECEIPTS	SEASON PASS	BUS	ADULT WALK-INS	HOUSE RENTS	CHILDRENS WALK-INS	COTTAGE PERMITS	CONCESSION	MISC.	PIER PERMITS	GROUP	PAY PHONE	TOTALS
MT. WASHINGTON		731				2,915								3,646.00
MYLES STANDISH	42,084.00	199,686	3,510	400		5,328		10,061	3,098.51	75.00			997.35	266,049.86
NATURAL BRIDGE	8,927.00		330	60	1.25									9,318.25
NICKERSON		329,869							7,825.00	4,648.88			2,186.80	344,529.68
OCTOBER MTN.	234.00	22,432	30											22,696.00
OTTER RIVER	2,607.00	17,465	960						104.45				42.61	21,179.06
OTIS										149.05				149.05
PITTSFIELD	5,809.00	10,923	590	20					50.50	650.00			150.29	18,192.79
PURGATORY CHASM									225.00					225.00
QUINSIGAMOND LAKE	5,980.00				1,201.00		98.00		51.00	4,349.00				11,679.00
QUINSIGAMOND REGATTA	8,961.00				1,397.00		299.00		2,551.00	2,030.00				24,568.00
ROBINSON	12,413.00	1,035	9,330	40					25.50	30.00				17,333.50
RUTLAND	15,993.00		7,000						226.00					23,219.00
SANDSFIELD	6,314.50	178	3,850	40	43.75				25.50	16.53				10,468.28
SAVOY MTN.	2,699.00	22,554	650		1.00	1,650			25.00					27,579.00
SHAWNE GROWELL	547.00	88,745				3,636			476.01	4,320.68			588.54	98,313.23
SKINNER						6,093								6,093.00
SOUTH MOUNTAIN			30											30.00
SPENCER	4,295.00		1,210			2,568								8,073.00
TOLLAND	14,621.00	55,059	2,350	60	13.00				25.00					72,128.00
TULLY	12.00	2,217												2,229.00
UPTON														2,210.00
WACHUSETTS MTN.						2,210			30,375.00	173,648.00				206,039.00
WALDEN POND	168,970.00	59,760		40		2,016			3,001.01				277.37	234,880.38
WARREN MANNING						2,832								0
WATSON POND	11,979.00		2,970	20	2.00		10.00							14,981.00
WELLS	1,441.00	41,094							61.00	175.00				42,771.00
WELLS STREETER	14,081.00		7,750		46.25		61.00		88.00					22,026.25
WENDELL	3,873.00		4,160		16.25		10.00		25.50	500.00		510		9,094.75
WILLARD BROOK	16,514.00	15,798	6,030	20		2,508			202.00					41,072.00
PEARL HILL. (W.B.)	5,604.00	8,231	1,190											15,025.00
WINDSOR	4,961.00	3,605	1,160	20					50.50					9,796.50
WOMPATICK	327.00	122,684				8,024			100.00					131,135.00
OFFICE ACCT.			550							28,242.94				28,792.94
TOTALS	832,117.70	1,299,009	256,260	2,320	4,190.00	109,180	763.45	10,661	114,860.03	266,026.96	1,914	3,837	4,975.13	2,906,114.27

PARKS FY 1989

TRAILER FEES

11,700.00

WALDEN BREEZES

11,700.00

TOTALS

SPECIAL ADM. FEES

1,410.00

REGION 1

1,100.00

REGION 2

480.00

REGION 3

30.00

REGION 4

REGION 5

3,020.00

TOTALS

RINKS FY 1989

	CHILDREN	ADULTS	SPECIAL EVENTS	RENTALS	WALK-INS	LOCKERS	CONCESSION	PAYPHONE	MISC.	JOGGING	TOTALS
AUBURN	7,240.00	8,974	1,673.50	129,220.00		930.25	11,600.67	42.78			159,681.20
BROCKTON	7,872.00	10,983	7,435.00	164,339.00		1,146.75	9,600.40	161.41			201,537.56
FALL RIVER	6,347.50	11,406	5,146.00	133,902.00		1,698.25	7,518.00	319.64	50.00		166,387.39
FRANKLIN	7,959.00	15,090	10,928.75	169,520.00		855.50	9,400.00	303.11			214,056.36
GARDNER	3,899.50	7,831	2,652.00	103,367.50	13.50	673.25	5,719.00	28.12	140.00		124,323.87
GREENFIELD	4,955.50	4,042	1,138.50	77,720.00		335.50	2,750.00	41.49			90,982.99
HAVERHILL	6,499.00	4,573	2,297.50	124,930.00		389.50	4,717.00	80.60			143,486.60
HOLYOKE	3,168.50	5,138	2,425.00	111,117.50		341.50	3,725.50	38.14			125,954.14
LOWELL	5,728.50	11,842	5,175.50	161,470.00		679.10	5,391.67	105.99			190,392.76
MARLBORO	5,154.50	5,967	2,732.50	134,355.00		267.45	6,886.00	131.23	6.08		155,499.76
NEW BEDFORD	3,813.00	7,187	13,788.50	144,220.00		675.49	5,601.00	328.45			175,613.44
NEWBURYPORT	7,539.00	7,658	9,487.00	168,480.00		514.05	15,125.53	291.41			209,094.99
NORTH ADAMS	2,232.50	3,759	2,171.50	62,055.00		321.05	3,019.00	17.58			73,575.63
PEABODY	6,735.00	9,711	7,034.50	155,977.50		710.00	10,074.71	125.56			190,368.27
PLYMOUTH	8,837.50	7,427	5,573.50	129,967.50		1,201.00	2,216.00	251.59			155,474.09
SPRINGFIELD	3,357.00	5,372	2,384.00	123,888.00		432.00	10,550.00	54.81			146,037.81
TAUNTON	3,950.50	10,379	6,667.50	145,532.00		794.75	8,310.00	142.74			175,776.49
WORCESTER	6,633.00	11,081	1,751.50	124,410.00		1,103.75	4,795.00	77.26			149,851.51
TOTALS	101,921.50	148,420	90,462.25	2,364,471.00	13.50	13,069.14	126,999.48	2,541.91	196.08		2,848,094.86

POOLS FY 1989

	<u>CHILDREN</u>	<u>ADULTS</u>	<u>PASSES GROUP</u>	<u>LOCKERS</u>	<u>PAYPHONE</u>	<u>CONCESSION</u>	<u>MISC.</u>	<u>TOTALS</u>
AGAWAM	1,736.25	2,190.50				142.55		4,069.30
ATTLEBORO	2,623.00	2,891.25						5,514.25
BROCKTON	3,408.50	2,674.00				950.00		7,032.50
CHICOPEE	2,313.50	1,626.50				166.00		4,106.00
CLINTON	3,255.25	758.00				215.00		4,228.25
FALL RIVER	6,656.75	1,894.00				700.00		9,250.75
FITCHBURG	2,707.50	1,248.50				301.99		4,257.99
HOLYOKE	2,443.25	1,053.00				402.99		3,899.24
LAWRENCE	5,059.75	1,746.50				1,049.00		7,855.25
LEOMINSTER	2,424.00	830.50				139.00		3,393.50
LOWELL	3,596.25	677.50				644.00		4,917.75
LUDLOW	2,531.75	693.50						3,225.25
MILFORD	3,250.50	2,289.00						5,539.50
SOUTHBRIDGE	2,783.50	1,044.00				88.00		3,915.50
SOUTH HADLEY	2,774.75	2,577.00				25.50		5,377.25
SPRINGFIELD	2,591.50	534.50				78.00		3,204.00
WESTFIELD	2,294.25	1,006.00				200.50		3,500.75
WORCESTER #1	3,666.50	2,704.50				225.00		6,596.00
WORCESTER #2	4,125.25	2,755.50				566.00		7,446.75
TOTALS	60,242.00	31,194.25				5,893.53		97,329.78

BEACHES FY 89

	PARKING	RECEIPTS	WALK- INS	SEASON PASS	BATH HOUSE	CONCESSION	LOCKERS	PAYPHONE	MISC.	BUS	HOUSE RENT	CHILDRENS WALK-INS	TOTALS
FT. PHOENIX	12,848			10,310		247.03		12.96					23,417.99
HORSENECK	290,852	79,165.00	14	63,970		62,440.00	5.70	181.99	207.30	520		10.00	497,365.99
SALISBURY	130,445	442,164.00		37,100		3,901.26		1,960.21	2,350.00	560	3,014		621,494.47
SCUSSET	84,518	191,196.94		15,130		5,504.34		940.06	1,884.00	100			299,273.34
SOUTH CAPE	17,335			1,770		301.01							19,406.01
TOTALS	535,998	712,525.94	14	128,280		72,393.64	5.70	3,095.22	4,441.30	1,180	3,014	10.00	1,460,957.80

SUMMARY

OFFICE OF PLANNING & DEVELOPMENT - FISCAL YEAR - 1989

LAND ACQUISITION - 7/1/88 to 6/30/89

<u>CATEGORY</u>	<u>No. of PARCELS</u>	<u>*Ave. COST Per PARCEL</u>	<u>**No. of CONTRACTS</u>	<u>TOTAL DOLLAR AMOUNT</u>
APPRAISERS	14	\$12,638.00	6	\$76,074.00
TITLE EXAMINERS	12	\$ 1,580.00	6	\$21,683.00
SURVEYORS	1	\$12,000.00	1	\$12,000.00

*Arrived at by taking out the highest and lowest figures

**Does not include Non-Profit Contracts

LAND ACQUIRED in FISCAL YEAR 1989

<u>NUMBER of PARCELS</u>	<u>AMOUNT of ACREAGE</u>	<u>TOTAL COST of PARCELS ACQUIRED</u>
30	1,918.70 A	\$15,375,701.00

Submitted by: John S. Lenkiewicz
Assisted by: Joseph Walsh
SEE ATTACHED!

ACQUISITION & CONSTRUCTION

FISCAL YEAR 1989

Land Acquisition - 7/1/88 to 6/30/89

1 of 3

LOCATION	AREA	GRANTOR	DATE RECORDED	ACREAGE	COST
MONTAGUE	CONNECTICUT RIVER CONS. RESTRICTION	HENRY S. WAIDLICH ET ALS	7/12/88	(234.3A)	\$ 427,150.
MIDDLEFIELD	MIDDLEFIELD S.F.	JANET E. GARDNER	7/25/88	116. A	175,000.
NASHPEE	QUASHNET RIVER	FORWARD DEVELOPMENT CORPORATION	7/28/88	336.15A	9,208,000.
NEWBURYPORT	NAUDSLAY S.P. - (BRICK HOUSE)	THE TRUST FOR PUBLIC LAND	8/12/88	23. A	580,000.
WHATLEY	CONNECTICUT RIVER APR	STANLEY W. & WANDA R. HELSTOWSKI	8/17/88	(27. A)	46,970.
LAWRENCE	MERRIMACK RIVER FRONT PARK	LAWRENCE REDEVELOPMENT AUTHORITY	8/26/88	11.5A	434,183.
DOUGLAS	WALLUM LAKE DOUGLAS S.F.	CLAIRE H. PUGLIESE	9/06/88	6,000 S.F.	12,600.
NORTHAMPTON	CONNECTICUT RIVER	JEFFWAY, AUGUST & SIMEONE	9/15/88	21,063 S.F.	455,000.
NORTH ADAMS	NATURAL BRIDGE	CITY OF NORTH ADAMS	9/20/88	17. A	22,300.
DOUGLAS	DOUGLAS S.F.	ANGELO & COTTO	9/28/88	20. A	105,000.
WILLIAMSTOWN	TACONIC TRAIL S.F. (WYLDE FARM)	MASS. FARM & CONSERVATION LANDS TRUST	9/29/88	105.4 A	130,000.
HAWLEY	HAWLEY S.F.	FRANKLIN LAND TRUST	11/30/88	5.31A	40,000.
EASTON	BORDERLAND S.P.	PAUL E. & PATRICIA SULLIVAN	12/20/88	6.62A	150,000.
HINGHAM & COHASSET	WOMPATUCK S.P.	UNITED STATES OF AMERICA	12/30/88	600. A	- - -

ACQUISITION & CONSTRUCTION

FISCAL YEAR 1989

2 of 3

Land Acquisition - 7/1/88 to 6/30/89

LOCATION	AREA	GRANTOR	DATE RECORDED	ACREAGE	COST
NORTH ADAMS	NATURAL BRIDGE S.P.	DONALD C. GREGALIS	01/09/89	10.2 A	\$ 49,500.
ANDOVER	HAROLD PARKER S.F.	PETER L. & BEVOLYN S. OLIVER	1/27/89	1.42 A	GIFT
DOUGLAS	DOUGLAS S.F.	RONALD M. & DAVID W. McCANN	1/31/89	26.12 A	EXCHANGE
DOUGLAS	DOUGLAS S.F.	COMMONWEALTH OF MASS.	1/31/89	-19.04 A	EXCHANGE
FAIRHAVEN	WEST ISLAND	REALTY TRANSFER COMPANY LIQUIDATING TRUST	2/16/89	338. A	1,650,000.
LOWELL (DISPOSITION)	LOWELL H.S.P. (MERRIMACK RIVER)	COMMONWEALTH OF MASS. (RACHEL ELLIS PARCEL)	3/02/89	-4,981 S.F.	- - -
TYRINGHAM	TYRINGHAM VALLEY CONS. RESTRICTION	DONALD B. HALE ET ALS	3/24/89	(152.75 A)	158,000.
CHESTERFIELD	CHESTERFIELD GORGE	ROBERT . & SANDRA H. EPPERLY	3/30/89	107.36 A	65,000.
LYNN	LYNN HERITAGE S.P.	ECONOMIC DEVELOPMENT & INDUSTRIAL CORPORATION	3/13/89	11.42 A	- - -
MONTAGUE	CONN. RIVER BIKEWAY EASEMENT	MONTAGUE ECONOMIC DEVEL. & INDUSTRIAL CORPORATION	3/20/89	(4.45 A)	- - -
PRINCETON	LAKE LORRAINE	RUSSEL & LINDA A. HUGHES	4/27/89	2. A	331,430.
SUNDERLAND	CONNECTICUT RIVER APR	CHARLES A. & PAULINE A. KUZMESKI	5/18/89	(47. A)	51,500.

ACQUISITION & CONSTRUCTION

3 of 3

FISCAL YEAR 1989

Land Acquisition - 7/1/88 to 6/30/89

LOCATION	AREA	GRANTOR	DATE RECORDED	ACREAGE	COST
MONTAGUE	CONNECTICUT RIVER APR	HELEN A. TUVAK	5/31/89	(107. A)	\$ 75,000 .
SUNDERLAND	MT. TOBEY	JOHN W. HUSSEY	6/21/89	180. A	389,000.
HAIRNICH	HAWSNEST S.P.	THE NATURE CONSERVANCY	6/29/89	5.5 A	285,000.
LAWRENCE	MERRILACK RIVER FRONT PARK	LAWRENCE REDEVELOPMENT AUTHORITY	6/30/89	14.7 A	535,068.

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BOOKBINDING CO., INC.

DEC 7 1992

100 CAMBRIDGE STREET
CHARLESTOWN, MASS

